

29

FILE COPY

AD-A202 796



A MODEL FOR TRANSLATING  
 MAC FLYING HOURS INTO AIRLIFT CAPABILITY  
 THESIS  
 James M. Ford  
 Major, USAF  
 AFIT/GLM/LSM/88S-19

DTIC  
 ELECTE  
 18 JAN 1989  
 S D  
 J E

DEPARTMENT OF THE AIR FORCE  
 AIR UNIVERSITY  
**AIR FORCE INSTITUTE OF TECHNOLOGY**

Wright-Patterson Air Force Base, Ohio

This document has been approved  
 for public release and sale its  
 distribution is unlimited.

89 1 17 1989

2

AFIT/GLM/LSM/88S-19

A MODEL FOR TRANSLATING  
MAC FLYING HOURS INTO AIRLIFT CAPABILITY  
THESIS

James M. Ford  
Major, USAF

AFIT/GLM/LSM/88S-19

DTIC  
ELECTE  
S 18 JAN 1989 D  
E

Approved for public release; distribution unlimited

The contents of the document are technically accurate, and no sensitive items, detrimental ideas, or deleterious information is contained therein. Furthermore, the views expressed in the document are those of the author and do not necessarily reflect the views of the School of Systems and Logistics, the Air University, the United States Air Force, or the Department of Defense.

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



AFIT/GLM/LSM/88S-19

A MODEL FOR TRANSLATING  
MAC FLYING HOURS INTO AIRLIFT CAPABILITY

THESIS

Presented to the Faculty of the School of Systems and Logistics  
of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Logistics Management

James M. Ford, M.S.

Major, USAF

September 1988

Approved for public release; distribution unlimited

## PREFACE

I would like to acknowledge the help of my advisor, Major Kent Gourdin, for his patience and guidance in this endeavor. I would also like to thank Major Jeff Porter for his enthusiasm and support in providing ample research information. Above all, I would like to thank ██████████ Ford for her unwavering confidence in my ability to complete this project.

Table of Contents

	Page
Preface . . . . .	ii
List of Figures . . . . .	v
List of Tables . . . . .	vi
Abstract . . . . .	viii
I. Introduction . . . . .	1
General Issue . . . . .	1
Specific Problem . . . . .	2
Investigative Questions . . . . .	3
Background . . . . .	3
Scope . . . . .	5
II. Background . . . . .	7
Airlift Services Industrial Fund . . . . .	7
ASIF Airlift Management Cycle . . . . .	8
Airlift Planning . . . . .	8
Financial Planning . . . . .	8
Operations . . . . .	9
Financial Administration . . . . .	9
ASIF and the Specific Problem . . . . .	9
Present Methodology . . . . .	10
Background . . . . .	10
Determining Airlift Capability . . . . .	11
Overview of Data . . . . .	13
Description of Data . . . . .	13
Data Collection . . . . .	14
Overview of Model . . . . .	14
Assumptions of the Model . . . . .	15
III. Methodology . . . . .	17
Developing the Model . . . . .	17
Determining Model Accuracy . . . . .	22
Answering the Investigative Questions . . . . .	24

	Page
IV. Findings and Analysis . . . . .	26
Present Methodology . . . . .	26
Model Construction . . . . .	28
Inter-Theater Flying Hours . . . . .	28
FY 86 MAI Flying Hours . . . . .	29
Model Validation for FY 86 . . . . .	38
Model Validation for FY 87 . . . . .	44
Model Application for FY 87 . . . . .	60
Computer Program for the Model . . . . .	68
V. Conclusions . . . . .	70
Review of Investigative Questions . . . . .	70
Additional Research . . . . .	73
Appendix A: Airlift Capability for August 1986 . . . . .	76
Appendix B: FY 86 Scheduled Channel Hours . . . . .	79
Appendix C: FY 86 MAI Portions of Channel Hours . . . . .	82
Appendix D: FY 86 MAI Airlift Capability in Tons . . . . .	166
Appendix E: Determination of Model Accuracy . . . . .	175
Appendix F: FY 87 Planned Channel Flying Hours . . . . .	177
Appendix G: FY 87 MAI Airlift Capability in Tons . . . . .	179
Appendix H: FY 87 Actual Scheduled Airlift Capability in Tons . . . . .	191
Appendix I: FY 87 Channel Cargo Forecasts . . . . .	203
Appendix J: TURBO BASIC Program for the Model . . . . .	208
Bibliography . . . . .	245
Vita . . . . .	246

List of Figures

Figure	Page
1. Model Accuracy for FY 86 (22 AF C-141) . . . . .	45
2. Model Accuracy for FY 86 (22 AF C-5) . . . . .	46
3. Model Accuracy for FY 86 (21 AF C-141) . . . . .	47
4. Model Accuracy for FY 86 (21 AF C-5) . . . . .	48
5. Model Accuracy for FY 87 (22 AF C-141) . . . . .	56
6. Model Accuracy for FY 87 (22 AF C-5) . . . . .	57
7. Model Accuracy for FY 87 (21 AF C-141) . . . . .	58
8. Model Accuracy for FY 87 (21 AF C-5) . . . . .	59

List of Tables

Table	Page
2.1 C-5 Airlift Capability for August 1986 . . . . .	12
3.1 Management Action Indicators (MAIs). . . . .	18
3.2 MAI Flying Hours for TCM-ALA (C-141) . . . . .	21
4.1 Airlift Capability Based On August, 1986 . . . . .	27
4.2 FY 86 MAC Channel Flying Hours . . . . .	30
4.3 MAI Portions of Inter-Theater Channel Hours . . . . .	32
4.4 MAI Portions of Inter-Theater Channel Hours . . . . .	33
4.5 FY 86 First Quarter MAI Airlift Capability in Tons . . . . .	35
4.6 FY 86 First Quarter MAI Airlift Capability in Tons . . . . .	36
4.7 FY 86 First Quarter MAI Airlift Capability in Tons . . . . .	37
4.8 FY 86 Actual Scheduled Airlift Capability in Tons . . . . .	40
4.9 FY 86 Actual Scheduled Airlift Capability in Tons . . . . .	41
4.10 FY 86 Actual Scheduled Airlift Capability in Tons . . . . .	42
4.11 Model Accuracy for FY 86 . . . . .	43
4.12 FY 87 Actual Scheduled Airlift Capability in Tons . . . . .	50
4.13 FY 87 Actual Scheduled Airlift Capability in Tons . . . . .	51
4.14 Model Accuracy for FY 87 . . . . .	52
4.15 Comparison of Channel Hours . . . . .	53
4.16 Comparison of Actual Scheduled Airlift Capability in Tons . . . . .	54
4.17 Absolute Percentage Error Comparison For FY 87 . . . . .	61
4.18 FY 87 Chanel Cargo Forecasts . . . . .	63
4.19 FY 87 Airlift Capability Surplus (Shortage) in Tons . . . . .	64
4.20 FY 87 Airlift Capability Surplus (Shortage) in Tons . . . . .	65
4.21 FY 87 Airlift Capability Surplus (Shortage) in Tons (Continued) . . . . .	66

4.22 FY 87 Airlift Capability Surplus (Shortage) in Tons  
(Continued) . . . . . 67

ABSTRACT

MAC maintains a global airlift system to support both wartime and peacetime passenger and cargo airlift requirements for the Department of Defense. Users of the global airlift system submit quarterly cargo requirement forecasts for each fiscal year which are then matched against MAC flying hours to determine if there is a surplus or deficit of airlift capability. If there is a deficit, MAC purchases commercial airlift to move the excess volume. The purpose of this research was to develop, test, and validate a model that will accurately translate aircraft flying hours into airlift capability. HQ MAC officials were concerned that airlift capability may not be accurately determined for each new fiscal year. Airlift capability was determined for each new fiscal year by choosing a busy month in the prior fiscal year and using that month as an average month of capability for the year.

The proposed model was compared to the current methodology to determine which was the better technique. Using the absolute percentage error as a basis for comparison, it was found that, overall, the model was more accurate than the current methodology. The model was dramatically more accurate in the Pacific Region, but was slightly less accurate in the Atlantic Region. The model also generated additional information that would allow MAC to more effectively purchase long-term commercial airlift. Using BASIC programming language, a computer program of the model was written to allow for routine use by MAC personnel.

# A MODEL FOR TRANSLATING MAC FLYING HOURS INTO AIRLIFT CAPABILITY

## I. Introduction

### General Issue

The mission of the Military Airlift Command (MAC) can be summarized as follows: "to provide the airlift necessary for the wartime deployment of balanced fighting forces and to provide sustaining logistical support for those fighting forces" (4:22). Note that there is no reference to peacetime operations, and yet MAC maintains a global airlift system to support both wartime and peacetime passenger and cargo airlift requirements for the Department of Defense. This is because MAC trains its aircrews for war in peacetime through a flying hour program and global airlift system in order to maintain a readiness posture. The global airlift system includes aerial ports, command and control, and various support services, in addition to aircraft, flight crews, and maintenance (4:22). The MAC flying hour program is based on the "minimum number of hours needed to train crewmembers, maintainers, transporters, planners, and many others for their wartime mission" (2:3).

A by-product of the MAC flying hour program is airlift capability. Capability can be defined as the number of passengers and/or tons of cargo that can be moved from one geographic point to another. Cargo airlift is accomplished through a worldwide channel network of Management Action Indicators (MAIs) that groups channels by regions from eight aerial ports in the U.S. A channel is a routing between two geographical points over which common user airlift service is provided (6:i).

Users of the global airlift system (Army, Navy, Air Force, Marines, and Defense Logistics Agency) submit cargo requirement forecasts for each fiscal year with a breakdown of quarterly forecasts to the MAC Channel Requirements Division (MAC/TRKC). The fiscal year forecasts for cargo requirements are matched against MAC flying hours for C-5, C-141, and C-130 aircraft to determine if they can move all the cargo tonnage. If there is a shortfall, MAC purchases commercial airlift to move the excess volume.

Some of the problems associated with the process mentioned above include the validity of user forecasts, current airlift requirement trends, and accurately determining MAC cargo airlift capability for each quarter. MAC/TRKC wants to ensure that MAC purchases only the commercial airlift that it really needs, which involves using commercial airlift efficiently, and minimizing excess airlift.

#### Specific Problem

HQ MAC officials are concerned that airlift capability may not be accurately determined for each new fiscal year. Specifically, aircraft flying hours are not accurately translated into airlift capability, that is, tons of cargo that can be moved from one geographic point to another. The problem can be further broken down into determining airlift capability for each of the 23 Management Action Indicators. A Management Action Indicator (MAI) is a group of requirements channels located in the same geographic region. A requirements channel is a MAC channel which serves two geographic points on a scheduled basis depending on volume of traffic generated by the users (6:i). Determining airlift capability below the MAI level would prove too cumbersome considering the added usefulness

of such detailed information and the fact that there are approximately 115 cargo requirements channels to handle CONUS outbound traffic.

### Investigative Questions

The purpose of this thesis is to develop, test, and validate a computer model that will accurately translate aircraft flying hours into airlift capability. As a minimum, the following questions must be answered:

1. In the context of purchasing commercial airlift, how does MAC currently determine airlift capability for a given fiscal year and is this determination of capability accurate?
2. Does historical data provide a basis for determining an alternative method of calculating airlift capability and, if so, can a computer model be formulated to generate MAC airlift capability?
3. If an alternative method is available, is it more accurate than the present method of calculating airlift capability?

The investigative questions are answered in part in each of the subsequent chapters with no one question answered completely in a single chapter. Chapter Two will provide some background information that will answer in part investigative questions one and two. Chapter Three will discuss the methodology of the computer model to be developed which will answer part of investigative question two. Chapter Four will discuss findings and analysis which will answer all of investigative question three and parts of investigative questions one and two. Chapter Five will follow with conclusions and recommendations.

### Background

An overview of MAC/TRKC operations can be described as follows:

Receives and consolidates Army, Navy, Air Force, Marines, and Defense Logistics Agency worldwide cargo airlift requirements over all MAC channels. Reviews requests for establishment of channels and publishes the MAC Sequence Listing for Channel Traffic. Consolidates, publishes, and distributes the long range

forecasts, midyear update to the long range, 100 day, beginning of the month, and end of the month short range forecasts for cargo requirements for all the services (13).

MAC/TRKC does not actually forecast cargo requirements but instead consolidates the user forecasts for distribution to the appropriate agencies. MAC/TRKC is the important link between the users (Army, Navy, Air Force, Marines, and Defense Logistics Agency) of cargo airlift and the providers of airlift capability (MAC). This office, in coordination with the Airlift Operations Branch (MAC/DOOMA), makes recommendations as to where and how airlift capability should be allocated in the global airlift system.

The MAC Sequence Listing for Channel Traffic is a publication that contains up-to-date information designed to help users of the global airlift system in planning and fulfilling their airlift requirements. The sequence listing is published at the beginning of each fiscal year. Section I of the publication lists the established channels and their tariffs, while Section II serves as a routing guide for cargo shipments. The channel rates in this publication apply to Department of Defense (DoD) cargo only. Non-DoD cargo can be moved through the system, but at non-US government rate tariffs, as listed in AFR 76-28 (6:1). Finally, this publication lists the channels that have been suspended from the system and the channels that have been added to the system.

Since MAC/TRKC, in coordination with MAC/DOOMA, makes recommendations as to where and how to allocate airlift capability, management tools are needed to support the decision-making process and their recommendations. If they can show specifically how they arrive at their decisions through an objective, quantitative approach that uses a proven methodology, then

more confidence can be placed in their recommendations for allocating airlift capability.

A model that accurately translates MAC flying hours into airlift capability could serve as a useful management tool. The MAC flying hour program, which changes with each fiscal year, determines the amount of organic airlift capability available to support the global airlift system. The C-5, C-141, and C-130 make up the organic fleet. As the flying hours change, the organic airlift capability changes, which impacts the airlift system. A tool that translates flying hours into airlift capability could prove useful in determining where and how the changes in flying hours affect the worldwide channel network. This tool could also prove useful in purchasing commercial airlift by matching airlift capability (derived from flying hours) against user forecasts to determine potential shortfalls of organic airlift capability.

### Scope

This thesis is designed to answer the MAC/TRKC management question: How can we increase the confidence we place in our ability to purchase and then utilize commercial airlift? By breaking the management question down into the investigative questions mentioned above, a quantitative approach can be applied to answer the investigative questions. Also, it must be emphasized that the conclusions and recommendations from this research are solely for the use of MAC/TRKC as a management tool. The research does not represent the one and only answer to the management question.

The model that will be developed will only translate flying hours for C-5 and C-141 aircraft into airlift capability. C-130 aircraft will not be considered because the majority of its operations support intratheater requirements. The model will only deal with the intertheater channel

requirements originating from the CONUS. The model will not be predictive in nature, that is, it will not predict where shortfalls of airlift capability will actually occur, but it will show how the airlift capability is distributed over the global airlift system and the areas where there is a potential for shortage of airlift capability.

Earlier, three problems associated with purchasing commercial airlift were identified. Of the three, only the problem of accurately determining MAC cargo airlift capability for each quarter will be addressed in this thesis. The other two, validating user forecasts by the major departments, and analyzing current airlift requirement trends will not be examined due to time and data constraints.

## II. Background

This chapter will discuss a number of subjects that could all be considered as background information for answering the investigative questions. The first discussion is concerned with the Airlift Services Industrial Fund and how it is related to the specific problem. The next section of the chapter will discuss the present method of calculating airlift capability in the context of purchasing commercial airlift. Next will come a detailed description of the data-producing situation followed by an overview of the model to be developed. The final section of the chapter will discuss the underlying assumptions of the model.

### Airlift Services Industrial Fund

The Airlift Services Industrial Fund (ASIF) is a resource allocation mechanism that MAC uses to manage the global airlift system (4:22). MAC uses the ASIF as a management tool for meeting changing airlift needs, and for allocating DOD airlift. The ASIF provides the discipline for allocating airlift to expensive, high priority cargo that must be moved by the premium transportation mode -- air (2:3). The primary concept associated with ASIF is that the user pays for the airlift service. The fund revolves when the user pays for services, replenishing the fund for the cost of services provided (11:43).

Prior to 1958, there was a major problem in allocating airlift because priorities for moving cargo were being abused. A priority system was established, but there was no real penalty on the user for inflating the priority of cargo. MAC paid for all airlift operations through its Operation and Maintenance (O&M) funds, so that the users paid nothing. As a result, most cargo was identified as high priority, and items that

were really low priority and could have been shipped by land or sea were being shipped by air while high priority items were having to wait for airlift to become available (4:22).

Congress created the ASIF in 1958, in order to make passenger and cargo airlift discernable as a cost (2:3). A buyer-seller relationship was established, with the shipper being held responsible for transportation mode selection. With ASIF, the buyer has to pay for using airlift service thereby effectively eliminating low priority cargo from the global airlift system. The O&M funds previously distributed to MAC were now allocated to the users to pay for airlift service (4:23). The responsibility for setting priorities for shipments and the associated costs were now borne by the users of the airlift system.

ASIF Airlift Management Cycle. This cycle consists of four interdependent and interacting phases that are similar to the one used in the airline industry. Both are striving to ensure their respective operations are executed in a financially healthy atmosphere. The four phases are described below (11:43).

Airlift Planning. In this phase, users of the system submit their forecasts for airlift service to MAC. Airlift capability is then allocated to meet user requirements. This phase is dependent on the accuracy of user forecasts, and the ability to accurately allocate airlift capability (11:43).

Financial Planning. In the second phase, an operational budget is developed that includes the cost to produce the required organic airlift, and to purchase the necessary commercial airlift. A tariff structure is established to offset operating costs with revenues (11:43).

Operations. This phase is merely the execution of the planning phase by employing MAC aircraft, along with commercial augmentation, to move the cargo through the global airlift system. The operations phase is dependent on, and generally only as effective as, the planning phase (11:43).

Financial Administration. Here, MAC gathers feedback, in the form of records and analyses, to determine how economically and efficiently airlift capability was employed. Users of the system are tracked and charged for services rendered. Finally, ASIF reports, reflecting activities and financial condition, are sent through HQ USAF to the Office of Secretary of Defense (OSD) (11:43).

ASIF and the Specific Problem. The problem of accurately translating flying hours into airlift capability is primarily related to the Airlift Planning and Financial Planning phases of the management cycle mentioned above. In the first phase, the problem manifests itself in allocating airlift capability to meet user requirements. Without an accurate determination of airlift capability, regardless of the methodology, (flying hours, counting sorties, or some other formula) the task of allocating airlift capability where it is needed to meet user requirements becomes more difficult. Imprecise allocation of airlift capability can adversely impact the effectiveness of the Operations phase, as well as degrade the Financial Planning phase.

The specific problem is also evident in the Financial Planning phase when procuring commercial augmentation. The purchase and allocation of commercial airlift can only be as accurate as the allocation of organic airlift capability (C-5, C-141, and C-130). Greater confidence in the allocation of organic airlift capability will facilitate purchasing long

term commercial airlift at cheaper rates. Conversely, increased costs are incurred if commercial airlift is purchased for areas where it is not needed. If a commercial mission is cancelled, according to the provisions of the contract suspension clause, MAC has 60 days to use that mission, or else pay a 38 percent penalty fee to the commercial carrier (10).

### Present Methodology

Background. An overview of the Airlift Operations Branch (MAC/DOOMA) can be described as follows:

The Airlift Operations Branch is responsible for planning and execution of the C-141 and C-5 flying hour programs, efficiently meeting DoD air transportation needs and MAC aircrew training requirements through applying a mixture of organic and commercial airlift capability, coordinating with the Air Reserve Forces and the SAC (KC-10) for airlift augmentation, maintenance of data automation planning systems, and providing briefings and written documentation to the Air Staff and MAC staff on current and future airlift operations (1:19).

MAC/DOOMA works closely with MAC/TRKC in the process of allocating airlift capability to meet user requirements. The output of this process is the monthly MAC Cargo Schedules for the Pacific and Atlantic regions, distributed to users 15 days prior to the operating month. MAC/DOOMA produces and updates these schedules through the use of the Airlift Mission Planning and Scheduling System (AMPS) and the Airlift Implementation and Monitoring System (AIMS). These computer data bases are used to process, store, generate, and update MAC schedules. AMPS contains information such as an index of passenger or cargo routes by station, summary of MAC passenger or cargo routes, and schedules, which includes facts on each operating route (5:A-1).

The information in AMPS is transferred to AIMS seven days prior to the operating month for cargo schedules so that AIMS users will have the capability to review planned flight missions scheduled for the operating

month. After data transfer, any changes to the schedules are now generated by AIMS and not AMPS. The MAC numbered air forces and their respective airlift units use AIMS to automatically produce and transmit to affected units, all additions, revisions, and deletions necessary to update the schedules. The combined use of AMPS and AIMS data bases provides the "operational flexibility required at all management levels to vary schedules in consonance with ever-changing operational and user airlift requirements" (5:A-1).

Determining Airlift Capability. Before allocating airlift to users, a determination of airlift capability must be made. At this point, it is appropriate to review investigative question one.

In the context of purchasing commercial airlift, how does MAC currently determine airlift capability for a given fiscal year and is this determination of capability accurate?

In order to answer the first part of investigative question one, an interview was conducted with GS-12 Deanie Nichols of MAC/DOOMA, who is involved in determining MAC airlift capability for the purpose of purchasing commercial airlift. The interview was very helpful in providing insight to the methodology used for calculating airlift capability. The second part of investigative question one will be addressed in Chapters Three and Four.

Airlift capability is currently being determined for each upcoming fiscal year by choosing a busy month in the prior fiscal year and using that month as an average month of capability for the year. For determining airlift capability for FY 87, the August, 1986, cargo schedules for the Pacific (22AF) and Atlantic (21AF) regions were used. The number of missions for each type of aircraft were counted and multiplied by the number of cargo tons the sortie could carry. For example, C-5 airlift

capability for the 21st Air Force, 436th Military Airlift Wing (MAW) was determined as shown in table 2.1 (9).

Table 2.1

C-5 Airlift Capability for August 1986  
21st Air Force (436 MAW)

<u>Mission</u>	<u>Channel</u>	<u>Missions</u>	<u>Tons</u>	<u>Capability</u>
O2F1	Dover - Rhein Main	4	x 50	= 200
O2F3	Dover - Rhein Main	5	x 50	= 250
O2F5	Dover - Rhein Main	4	x 50	= 200
O2F7	Dover - Rhein Main	4	x 50	= 200
O2R1	Dover - Ramstein	4	x 50	= 200
O2R3	Dover - Ramstein	4	x 50	= 200
O2R7	Dover - Ramstein	5	x 50	= 250
O2T1	Dover - Incirlik	4	x 50	= 200
O2T3	Dover - Incirlik	5	x 50	= 250
O2W3	Dover - Dhahran	3	x 50	= 150
O2Z7	Dover - Dhahran	1	x 50	= 50
O2V7	Norfolk - Bahrain	4	x 50	= 200
Total Capability in Tons				2350

The methodology shown above is also used for C-141 aircraft, again using the August, 1986, cargo schedules for the Pacific and Atlantic regions. The August airlift capability for each type of aircraft is assumed to be the monthly average for FY 87. Notice that the monthly airlift capability is determined without the use of flying hours. This demonstrates that flying hours are not necessary to determine airlift capability, but the accuracy of this methodology is yet to be determined. Also notice that airlift capability is not determined by Management Action Indicator (MAI), that is, groups of channels, but rather by the Pacific and Atlantic regions. This methodology does not provide the level of detail necessary for use as a management tool, especially when allocating

airlift capability to a specific MAI, or when studying the effects of changing airlift capability for a specific MAI.

The average monthly airlift capability (as determined above) is matched against the average monthly cargo requirements, in order to determine the shortfall or surplus of airlift capability. Average monthly cargo requirements are derived from the Annual Airlift Requirements - Service Consolidation document published by MAC/TRKC. The total cargo requirements for the fiscal year, including the Pacific and Atlantic regions, are divided by 12 to determine the average monthly cargo requirements (9). The same limitations in using airlift capability as determined above, apply to the usefulness of the average monthly shortfall or surplus of airlift capability. There is no indication of where the potential shortfall or surplus occurs in the global airlift system, that is, which MAIs are affected.

#### Overview of Data

Description of Data. The data that are needed to develop a computer model that will translate flying hours into airlift capability and determine a surplus or shortfall are: total planned channel flying hours for each type of aircraft (C-5 and C-141) for a given quarter, a listing of the cargo routes that support requirements and the associated number of sorties and flying hours, and cargo requirements, in tons, for the fiscal year. Each of the above data can be considered primary data, that is, data that is gathered from original sources specifically for accomplishing some special task (3:135).

The data is maintained in computer data bases, mainly AMPS and AIMS, and is also found in periodic reports. Total fiscal year flying hours for each type of aircraft are found in yearly statements of Total MAC Flying

Hours. The number of flying hours and sorties allocated to the global airlift system are found in the MAC Cargo Schedules for the Pacific and Atlantic regions. Cargo requirements, in tons, are found in the Annual Airlift Requirements - Service Consolidation document. This document contains the cargo forecasts from the major department users (Army, Navy, Air Force, Marines, and Defense Logistics Agency). The data is considered valid since MAC conducts day-to-day operations using the data, and the information derived from the data is necessary to build the computer model.

Data Collection. Research data was collected by the author at HQ MAC during temporary duty (TDY) in October, 1987. MAC/TRKC provided the Annual Airlift Requirements - Service Consolidation documents, and MAC/DOOMA provided yearly statements of Total MAC Flying Hours, and MAC Cargo Schedules for the Pacific and Atlantic regions. All of the data was obtained as hard copies except for some of the MAC Cargo Schedules which were obtained on microfiche.

#### Overview of Model

A model is defined as "a representation of an object, system, or idea in some form other than that of the entity itself" (12:4). A computer model that will translate flying hours into airlift capability can be considered a descriptive model, that is, a model that describes facts and relationships (8:147). Another way models can be categorized is by their degree of abstraction, with physical models considered exact, and mathematical models considered abstract. The model that will be developed is regarded as mathematical in that symbols, rather than physical devices, are used to represent entities. Because the model is mathematical in

nature, and therefore abstract, close attention must be paid to ensure that the model is a valid reflection of the problem (12:10).

The model that will be developed can also be considered deterministic in nature in that an exact relationship between the independent variable, flying hours, and the dependent variable, airlift capability, is described. If the same value of flying hours is repeatedly used as input for the model, then the same value of airlift capability should be calculated also. Finally, the model can be considered quantitative in nature because all of the data used to build it originated from objective sources such as computer data bases. Quantitative data can be measured directly, as in numbers, and is objective in nature.

#### Assumptions of the Model

For the model to be developed, certain assumptions are made and explained below.

1. Airlift capability is associated with every flying hour allocated to the global airlift system. Every flying hour used in supporting the airlift system can be applied to moving cargo.
2. The model is based on past data (FY 86) and assumes that the MAIs do not change significantly from year to year. The groups of cargo channels remain relatively stable over time. If an MAI changes significantly, that is, enough to change certain parameters, then the effect on the total global airlift system must be examined, to keep the model useful. This circumstance will be discussed further in Chapter Three.
3. The model assumes that all flying hours and airlift capability are for CONUS outbound cargo movement and the return to CONUS. In supporting this assumption, intra-theater operations are not

considered since they usually do not support CONUS outbound traffic. By removing intra-theater flying hours, the goal of only considering the flying hours that directly support CONUS outbound inter-theater operations can be obtained.

4. The independent variable in the model is the MAC channel flying hours for C-5 and C-141 aircraft. Flying hours vary from year to year, causing a corresponding change in organic airlift capability.

5. The dependent variable in the model is MAC organic airlift capability. It depends exclusively on the flying hours allocated to the global airlift system.

6. C-130 flying hours and associated airlift capability are not considered in the model. The majority of flight operations are intra-theater in nature, and outside the scope of the model (10).

The basic assumptions mentioned above are general and do not consider some of the more detailed or subtle assumptions of the model. These will be explained as they are encountered in developing the model in chapter three.

This chapter has provided some background information on ASIF and the present methodology, and the relation both have to the specific problem. An overview of the data necessary to develop the model has been presented, as well as some characteristics of the model and its associated categories. This chapter has also answered the first part of investigative question one. The remaining chapters will answer the other investigative questions, as well as chronicle the development and validation of the model.

### III. Methodology

The first section in this chapter deals with developing a computer model to translate flying hours into airlift capability. The next section will contain the procedures for determining the accuracy of the model as well as the accuracy of the current methodology. The final section in this chapter will show how the methodology can be used to answer the investigative questions.

#### Developing the Model

As mentioned in the Overview-of-Data section in Chapter Two, the following information is needed to structure an alternative model for calculating airlift capability and determining a surplus or shortfall:

1. Total planned channel flying hours for each type of aircraft for a given quarter.
2. A listing of the cargo routes and the associated number of sorties and flying hours.
3. Cargo requirements, in tons, for the fiscal year.

Chapter Two also mentioned that the first and second categories of data can be found in the statement of Total MAC Flying Hours, and the MAC Cargo Schedules from MAC/DOOMA. The third category of data can be found in the Annual Airlift Requirements - Service Consolidation Document from MAC/TRKC.

The first step in structuring a model for calculating airlift capability involves flying hours scheduled for a specific MAI, or group of channels. For convenience, the MAIs are listed in Table 3.1. The flying hours scheduled for each of the 23 MAIs can be extracted from the monthly MAC Cargo Schedules for the months involved in each specific quarter. This is a long and laborious process by hand, and the most significant hurdle to overcome in executing the methodology, as there are 92

---

TABLE 3.1

Management Action Indicators (MAIs)

21st Air Force (Atlantic)

From DOVER (DOV) to:

Germany (GER)  
Mediterranean (MED)  
Middle East (M/E)

From PATRICK (COF) to:

Africa (AFR)

From MCGUIRE (WRI) to:

Lajes (LGS)  
Mediterranean (MED)  
North Country (N/C)

From NORFOLK (NGU) to:

Africa (AFR)  
Caribbean (CARIB)  
Mediterranean (MED)  
Middle East (M/E)  
North Country (N/C)

From CHARLESTON (CHS) to:

Africa (AFR)  
Bermuda (BDA)  
Central/South America (C/S)  
United Kingdom (UK)

From TINKER\* (TIK) to:

Germany (GER)

22nd Air Force (Pacific)

From MCCHORD (TCM) to:

Alaska (ALA)  
North Pacific (NPAC)

From TRAVIS (SUU) to:

Central Pacific (CPAC)  
North Pacific (NPAC)

From NORTON (SBD) to:

Central Pacific (CPAC)  
South Pacific (SPAC)

\* Tinker is an Air Force Logistics Command base that moves cargo.

(23 MAIs x 4 quarters) different extractions necessary to complete this task. However, once the flying hours for a specific MAI are computed, that portion of the scheduled quarterly flying hours dedicated to the MAI can be calculated as follows:

$$B - H = T \quad (1)$$

$$Q / T = P \quad (2)$$

where

B = Total scheduled channel flying hours for a FY 86 quarter  
H = Total scheduled channel intratheater hours for a FY 86 quarter  
T = Total scheduled channel intertheater hours for a FY 86 quarter  
Q = MAI flying hours for a FY 86 quarter  
P = Portion of T dedicated to the MAI

Since the model is only concerned with determining airlift capability for CONUS outbound intertheater requirements, intratheater flying hours must be removed from total scheduled channel flying hours so that P, the portion of T dedicated to the MAI, will be based only on intertheater hours and not a mixture of the two.

Also, an average sortie length for each MAI will be determined as follows:

$$Q / S = A \quad (3)$$

where

Q = MAI flying hours for a FY 86 quarter  
S = Number of sorties flown against a MAI for a FY 86 quarter  
A = Average sortie length in hours for a MAI in a FY 86 quarter

An example of the data necessary to execute the above methodology is presented in Table 3.2. A brief review is in order. FY 86 data, extracted from the monthly MAC Cargo Schedules, and tabulated in the format

shown in Table 3.2, are used to compute Q (MAI flying hours for a FY 86 quarter), S (number of sorties flown against an MAI for a FY 86 quarter), and A (average sortie length in flying hours for a MAI in a FY 86 quarter). Once the value of T (the total scheduled channel intertheater hours for a FY 86 quarter) is calculated from the FY 86 MAC Cargo Schedules, P (portion of T dedicated to the MAI) can be calculated by dividing Q by T.

P and A are the keys to translating flying hours into MAC airlift capability for a MAI in any quarter of a given fiscal year. This can be done using the formulas:

$$B1 \times H1 = T1 \quad (4)$$

$$P \times T1 = E \quad (5)$$

$$E / A = S1 \quad (6)$$

$$S1 \times C = M \quad (7)$$

$$M - F = U \text{ or } V \quad (8)$$

where

- B1 = Total planned channel flying hours for a given quarter
- H1 = Total planned channel intratheater hours for a given quarter
- T1 = Total planned channel intertheater hours for a given quarter
- P = Portion of T (total scheduled channel intertheater hours for a FY 86 quarter) dedicated to the MAI
- E = Estimated MAI flying hours
- A = Average sortie length in hours for a MAI in a FY 86 quarter
- S1 = Estimated number of sorties flown against a MAI for a given quarter
- C = Cargo tonnage the aircraft can haul
- M = Total quarterly airlift capability in cargo tons
- F = Total quarterly MAI cargo tonnage forecast
- U = MAI shortage of airlift capability
- V = MAI surplus of airlift capability

The above formulas can be used to calculate airlift capability for any MAI for each upcoming fiscal year, by using the figures and

TABLE 3.2

MAI Flying Hours for TCM - ALA (C-141)  
January - March 1986

Cargo Route <sup>1</sup>	Number <sup>2</sup> of Missions	Cargo <sup>3</sup> Percentage for ALA	Missions <sup>4</sup> for ALA	Mission <sup>5</sup> Flight Time	Flying <sup>6</sup> Hours for ALA
P691P	14	50(NPAC)	7.0	60.75	425.25
Y654C	12	100	<u>12.0</u>	18.75	<u>225.00</u>
		S =	19.0	Q =	650.25

1. Identifies the route peculiar to the mission. An explanation of this identifier is found in the MAC Cargo Schedules.

2. Lists the number of missions that serve the MAI(s).

3. The percentage of cargo on a mission dedicated to ALA. 50 percent of the cargo for the P691P mission is going to ALA. The other 50 percent would be listed in the MAI Flying Hours for TCM-NPAC (C-141) table.

4. Adjusted number of missions dedicated to the MAI. Product of columns two and three. For the P691P mission, only 7 missions are listed as serving ALA for the quarter.

5. Flight time for one mission.

6. Flying hours allocated to the MAI. Product of the fourth and fifth columns.

S = Number of sorties flown against a MAI for a FY 86 quarter

Q = MAI flying hours for a FY 86 quarter

T = Total scheduled channel intertheater hours for a FY 86 quarter (assume 14,000 for this example)

$$650.25 / 14000 = 0.046 = P$$

$$650.25 / 19.0 = 34.22 = A$$

P = Portion of T dedicated to the MAI

A = Average sortie length in hours for a MAI in a FY 86 quarter

formulas that were extracted from the FY 86 data. Now that the computer model is structured, the computer program for the model can be developed.

The computer model, structured on data from FY 86, will be written in BASIC programming language. This language will be used because of its flexibility, availability, user-friendly orientation, and ability to operate in the microcomputer environment. MAC/TRKC, and MAC/DOOMA have Zenith 248 microcomputers and the corresponding BASIC documentation necessary to run programs using this language. Anyone with basic micro-computer skills should be able to run the model without difficulty. Documentation will be provided with the model to embellish the program and familiarize users with the model.

For each type of aircraft (C-5 and C-141), the model will start by listing the values of P and asking whether the operator would like to change any MAI portions. If a value of P is changed, then the model will prompt the user to change other MAI portions, as necessary. The total of all the MAI portions will equal 1.00, so a change in one MAI portion will prompt a change in another MAI portion. The model will then ask for the values of F (MAI cargo tonnage forecast) and B1 (total planned channel flying hours for a given quarter). Using the methodology mentioned above, the model will translate flying hours (E) into airlift capability (M) in order to determine a shortage (U) or surplus (V). Any shortage will imply a commercial airlift requirement.

#### Determining Model Accuracy

The model will be validated for accuracy using the following formula:

$$M / L = Z \quad (9)$$

where

M = Total quarterly airlift capability in cargo tons  
L = Actual quarterly airlift capability in cargo tons  
Z = Quotient which indicates how closely M equals L with 1.00 considered perfect accuracy

The value L will be manually computed using the monthly MAC Cargo Schedules for the fiscal year in question. For FY 86, the accuracy should be perfect since the same data is being used to build the model and to determine actual airlift capability. The sorties flown for a quarter will be counted and multiplied by the cargo capacity of the aircraft. If the model translates flying hours into airlift capability accurately, the capability determined by the model should equal the capability determined by counting the sorties.

The same procedure mentioned above can be used for validating the accuracy of the model using planned FY 87 channel flying hours. The flying hours for FY 87 are not the same as for FY 86, so some degradation of accuracy can be expected. A feature of the model is that the percentage change in flying hours from FY 86 to another fiscal year is what determines the percentage change in MAI airlift capability from FY 86 to another fiscal year. The percentage change in MAI airlift capability is equal to the percentage change in channel flying hours from FY 86 to another fiscal year. A limitation of this feature is that a change in flying hours is allocated to every MAI in the model, when it is possible that not every MAI would receive more or less flying hours with such a change. This limitation will probably affect model accuracy, which will be determined in Chapter Four.

In Chapter Two, an analysis of the present method of calculating airlift capability was presented. In order to determine the accuracy of the present method, the following formula is used:

$$D / L = R$$

(10)

where

- D = Average quarterly airlift capability for FY 86
- L = Actual quarterly airlift capability for FY 86
- R = Quotient (calculated for each quarter of FY) which indicates how closely D equals L with 1.00 considered perfect accuracy

The value D will be broken down no further than average quarterly airlift capability for the Pacific and Atlantic regions. The value L will be determined as mentioned above by counting the number of sorties flying for a quarter, multiplying the number of sorties by the cargo capacity of the aircraft, and totalling the airlift capability. Since R is calculated for each quarter of FY 86, some variability is expected between D and L.

The same methodology can be used for determining the accuracy of the present method for FY 87. The value of D which is based on FY 86 data will be compared against the value of L for FY 87 data to determine R for each quarter.

Z (quotient which indicates how closely M equals L with 1.00 considered perfect accuracy) will be compared with R (Quotient which indicates how closely D equals L with 1.00 considered perfect accuracy), and whichever is closer to 1.00 will be considered the more accurate.

#### Answering the Investigative Questions

It is appropriate at this point to restate the investigative questions:

1. In the context of purchasing commercial airlift, how does MAC currently determine airlift capability for a given fiscal year and is this determination of capability accurate?
2. Does historical data provide a basis for determining an alternative method of computing airlift capability and if so, can a computer model be formulated to generate MAC airlift capability?

3. If an alternative method is available, is it more accurate than the present method of computing airlift capability?

All of the investigative questions were addressed either partially or completely in this chapter. The first part of investigative question one was discussed in Chapter Two, while the second part was discussed in the second section of this chapter. Investigative question two was thoroughly discussed in the first section of this chapter, while investigative question three was addressed in section two of this chapter.

Now that the methodology for answering the investigative questions has been presented, it is possible to move on to answering the investigative questions. This will be accomplished in Chapter Four, Findings and Analysis.

#### IV. Findings and Analysis

This chapter will execute the methodology delineated in Chapter Three and present the findings and analysis. The first part of this chapter will determine airlift capability based on FY 86 data using the present methodology. The second part of this chapter will construct the proposed model based on FY 86 data. Next, the validity of both models will be determined using FY 86 data. Since both models are based on FY 86 data, in the next section they will be validated against FY 87 data to determine how they perform against a new set of data. The next two sections will present a model application for FY 87 and a computer program of the model.

##### Present Methodology

As mentioned earlier, airlift capability is currently being determined for each upcoming fiscal year by choosing a busy month in the prior fiscal year and using that month as an average month of capability for the year. For determining airlift capability for FY 87, the August, 1986 cargo schedules for the Pacific (22 AF) and Atlantic (21 AF) regions were used. The number of missions for each type of aircraft were counted and multiplied by the number of cargo tons the sortie could carry. The results of the methodology are listed in Appendix A and summarized on the next page in Table 4.1.

Notice in Table 4.1 that the average monthly capability for each type of aircraft was multiplied by three so that an average quarterly capability could be determined. This is necessary in order to compare this methodology with the proposed model (which only determines capability on a quarterly basis) later in the chapter. Notice also that the present methodology breaks the airlift capability down by military airlift wing

TABLE 4.1

Airlift Capability Based On August, 1986<sup>1</sup>  
(In Tons)

22nd Air Force

<u>C-141</u>				<u>C-5</u>			
Average Monthly				Average Quarterly			
63 MAW	1116	x	3 =	3348			
62 MAW	756	x	3 =	2268			
60 MAW	792	x	3 =	<u>2376</u>	60 MAW	1395	x 3 = <u>4185</u>
TOTAL QUARTERLY CAPABILITY				7992			<u>4185</u>

21st Air Force

<u>C-141</u>				<u>C-5 2</u>			
Average Monthly				Average Quarterly			
437 MAW	1700	x	3 =	5100			
438 MAW	1760	x	3 =	<u>5280</u>	436 MAW	2350	x 3 = <u>7050</u>
TOTAL QUARTERLY CAPABILITY				10380			<u>7050</u>

1. See Appendix A.
2. From Table 2.1.

and not by management action indicator (MAI, or group of channels). This detracts from the usefulness of the methodology because it only shows the source of the airlift capability and not how it is distributed throughout the worldwide channel network.

### Model Construction

This section will construct the proposed model using FY 86 data. Emphasis will be placed on two parameters of the model: 1) T = Total scheduled channel inter-theater hours for a FY 86 quarter, and 2) Q = MAI flying hours for a FY 86 quarter. The methodology used in calculating each of these parameters will be discussed in different subsections.

Inter-Theater Flying Hours. Recall in Chapter Three that the formula for calculating T can be stated as follows:

$$B - H = T \quad (1)$$

or 
$$T + H = B \quad (11)$$

where

T = Total scheduled channel inter-theater hours for a FY 86 quarter  
H = Total scheduled channel intra-theater hours for a FY 86 quarter  
B = Total scheduled channel flying hours for a FY 86 quarter

For FY 86 only, T was determined by literally counting every sortie found in the MAC cargo schedules for each MAI (in the Pacific and Atlantic regions) for a given quarter, multiplying the sorties by their associated flight time, and then summing the flying hours to obtain the total. This is the equivalent of summing the individual Q (MAI flying hours for a FY 86 quarter) parameters. H was determined in a similar manner as T in that every intra-theater sortie for a given FY 86 quarter was counted and multiplied by its associated flight time. The results are presented in

Appendix B and summarized in Table 4.2. The percentages of intra-theater to total channel hours for the C-141 (Table 4.2) are important in that they can be applied to future fiscal years' values of B1 (total planned channel flying hours for a given quarter) to obtain values of H1 (total planned channel intra-theater hours for a given quarter). An assumption is being made that the relationship between H (total scheduled channel intra-theater hours for a FY 86 quarter) and B (total scheduled channel flying hours for a FY 86 quarter) is the same as the relationship of H1 (total planned channel intra-theater hours for a given quarter) to B1 (total planned channel flying hours for a given quarter). The reason this assumption has to be made is that for future fiscal years, only B1 (total planned channel flying hours for a given quarter) are available early enough to make the model useful. If the model cannot be used from six months to a year in advance, a high degree of utility is lost because long range planning is degraded. Another reason for the assumption mentioned above is that a breakout of intra-theater and inter-theater flying hours was not available, so the percentages of intra-theater to total channel hours must be used to estimate intra-theater flying hours in the future.

FY 86 MAI Flying Hours. Determining the parameter Q (MAI flying hours for a FY 86 quarter) proved to be a difficult task because of the large number of MAC channels and sorties supporting them. Using the methodology presented in Table 3.2, the parameters Q and S (number of sorties flown against a MAI for a FY 86 quarter) can be calculated. Appendix C contains the tables used for determining all of the values of Q and S (133 different values). The estimated number of values for Q and S was 92 (23 MAIs x 4 quarters) but the number grew when it became apparent that a number of MAIs were concurrently served by C-5s and C-141s.

TABLE 4.2

FY 86 MAC Channel Flying Hours <sup>1</sup>  
 (From MAC Cargo Schedules)

<u>22nd Air Force</u>				
	QTR 1	QTR 2	QTR 3	QTR 4
Inter-Theater Hours (C-141)	15045	14266	16637	16594
Intra-Theater Hours (C-141)	<u>1245</u>	<u>1046</u>	<u>1097</u>	<u>1132</u>
TOTAL CHANNEL HOURS (C-141)	16290	15312	17734	17726
Percent Intra-Theater to Total Channel Hours (C-141)	7.6	6.8	6.2	6.4
Inter-Theater Hours (C-5) <sup>2</sup>	2926	2644	2488	2947
<u>21st Air Force</u>				
	QTR 1	QTR 2	QTR 3	QTR 4
Inter-Theater Hours (C-141)	13794	13954	14055	12470
Intra-Theater Hours (C-141)	<u>254</u>	<u>251</u>	<u>216</u>	<u>256</u>
TOTAL CHANNEL HOURS (C-141)	14048	14205	14271	12726
Percent Intra-Theater to Total Channel Hours (C-141)	1.8	1.8	1.5	2.0
Inter-Theater Hours (C-5) <sup>2</sup>	3232	2935	3179	3364

1. From Appendix B.

2. There are no intra-theater flying hours for the C-5.

Now that the parameters Q and S are known, the next step in constructing a model based on FY 86 data is to determine the parameter A (average sortie length in hours for a MAI in a FY 86 quarter) using the following formula from Chapter Three:

$$Q / S = A \quad (3)$$

where

Q = MAI flying hours for a FY 86 quarter  
S = Number of sorties flown against a MAI for a FY 86 quarter  
A = Average sortie length in hours for a MAI in a FY 86 quarter

The parameter A becomes important in future applications of the model. It will be instrumental in determining the estimated number of sorties flown against an MAI for a given quarter. The values of A are also listed in Appendix C along with the parameters Q and S.

Recall from Chapter Three that P (portion of T dedicated to the MAI) can be determined using the following formula:

$$Q / T = P \quad (2)$$

where

Q = MAI flying hours for a FY 86 quarter  
T = Total scheduled channel inter-theater hours for a FY 86 quarter  
P = Portion of T dedicated to the MAI

The values of Q and T for each region (Pacific and Atlantic) are used to calculate the values of P. The computations of P are also listed in Appendix C and are summarized on the next two pages in Tables 4.3 and 4.4. It is evident from examining the tables that the MAI SUU-CPAC (Travis to Central Pacific) has the largest portion of C-141 inter-theater channel flying hours in the Pacific region, and that the same MAI has the

TABLE 4.3

MAI Portions of Inter-Theater Channel Hours  
Pacific Region (22 AF)

		<u>C-141</u>			
MAI		QTR 1	QTR 2	QTR 3	QTR 4
TCM					
	ALA	.057	.061	.052	.062
	NPAC	.128	.147	.133	.138
	DOV-MED 1	0	0	.002	.007
	DOV-M/E 1	0	0	.003	.013
	WRI-MED 1	0	0	.002	.002
SBD					
	CPAC	.042	.044	.039	.040
	SPAC	.042	.044	.039	.040
	DOV-MED 2	0	0	.003	.004
	DOV-M/E 2	0	0	.003	.011
	WRI-MED 2	0	0	.004	.002
SUU					
	CPAC	.731	.704	.701	.642
	NPAC	0	0	.007	.020
	DOV-MED 3	0	0	.005	.005
	DOV-M/E 3	0	0	.005	.010
	WRI-MED 3	0	0	.002	.004
	TOTAL PORTIONS	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>

		<u>C-5</u>			
MAI		QTR 1	QTR 2	QTR 3	QTR 4
SUU					
	CPAC	.368	.461	.648	.595
	NPAC	.117	.105	.101	.134
	TIK-GER	.515	.434	.251	.271
	TOTAL PORTIONS	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>

1. TCM (McChord) serves this MAI in the third and fourth quarters.
2. SBD (Norton) serves this MAI in the third and fourth quarters.
3. SUU (Travis) serves this MAI in the third and fourth quarters.

TABLE 4.4

MAI Portions of Inter-Theater Channel Hours  
Atlantic Region (21 AF)

		<u>C-141</u>			
MAI		QTR 1	QTR 2	QTR 3	QTR 4
DOV					
	GER	.066	.053	.044	.050
	MED	.108	.074	.049	.011
	M/E	.014	.014	.014	.016
WRI					
	LGS	.092	.093	.094	.108
	MED	.160	.203	.212	.217
	N/C	.076	.071	.076	.090
CHS					
	AFR	.019	.016	.016	.018
	BDA	.006	.006	.005	.007
	C/S	.047	.047	.051	.056
	UK	.078	.084	.084	.097
COF					
	AFR	.049	.047	.046	.055
NGU					
	AFR	.050	.055	.053	.033
	CARIB	.025	.025	.024	.027
	MED	.170	.171	.187	.168
	M/E	.015	.017	.010	.019
	N/C	.025	.024	.035	.028
	TOTAL PORTIONS	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>

		<u>C-5</u>			
MAI		QTR 1	QTR 2	QTR 3	QTR 4
DOV					
	GER	.273	.254	.345	.366
	MED	.218	.231	.244	.341
	M/E	.377	.370	.232	.124
NGU					
	MED	.132	.145	.152	.130
CHS					
	C/S	0	0	.019	.039
COF					
	AFR	<u>0</u>	<u>0</u>	<u>.008</u>	<u>0</u>
	TOTAL PORTIONS	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>	<u>1.000</u>

largest portion of C-5 hours. In the Atlantic region (Table 4.4), the MAI WRI-MED (McGuire to the Mediterranean) has the largest portion of C-141 hours while DOV-GER (Dover to Germany) has the largest portion of C-5 hours.

The above paragraphs have mentioned how a model based on FY 86 data can be constructed using the following formulas:

$$T + H = B \quad (11)$$

$$Q / S = A \quad (3)$$

$$Q / T = P \quad (2)$$

where

- T = Total scheduled channel inter-theater hours for a FY 86 quarter
- H = Total scheduled channel intra-theater hours for a FY 86 quarter
- B = Total scheduled channel flying hours for a FY 86 quarter
- Q = MAI flying hours for a FY 86 quarter
- S = Number of sorties flown against a MAI for a FY 86 quarter
- A = Average sortie length in hours for a MAI in a FY 86 quarter
- P = Portion of T dedicated to the MAI

The above formulas, based on FY 86 data, are the building blocks for constructing a model that will translate flying hours into airlift capability. In order to show the interaction of the formulas and where they fit in the process of translating flying hours into airlift capability, the model is presented in Tables 4.5, 4.6, and 4.7.

The first quarter of FY 86 is shown in the tables with the rest of the year presented in Appendix D. Notice how airlift capability is determined for each of the MAIs in the Pacific and Atlantic regions. Intra-theater channel hours are subtracted from total channel hours to obtain inter-theater channel hours. The MAI portion is applied to this to determine MAI flying hours. This figure is then divided by average mission length to compute the number of sorties flown against the MAI.

TABLE 4.5

FY 86 First Quarter MAI Airlift Capability in Tons  
Pacific Region (22 AF)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	16290	- 1238	= 15052	x .057	= 857.96	/ 15.92	= 54	972
NPAC	16290	- 1238	= 15052	x .128	= 1926.66	/ 36.31	= 53	954
SBD								
CPAC	16290	- 1238	= 15052	x .042	= 632.18	/ 48.17	= 13	234
SPAC	16290	- 1238	= 15052	x .042	= 632.18	/ 48.17	= 13	234
SUU								
CPAC	16290	- 1238	= 15052	x .731	= 11003.01	/ 47.65	= 231	4158
NPAC	16290	- 1238	= 15052	x 0	= 0	/ 0	= 0	<u>0</u>
TOTAL CAPABILITY								6552

C-5

SUU								
CPAC	2926	- 0	= 2926	x .368	= 1076.77	/ 29.07	= 37	1665
NPAC	2926	- 0	= 2926	x .117	= 342.34	/ 25.41	= 13	<u>585</u>
TOTAL CAPABILITY								2250

1. From Table 4.2.
2. Based on 7.6% of scheduled channel hours (Table 4.2). There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

TABLE 4.6

FY 86 First Quarter MAI Airlift Capability in Tons  
Atlantic Region (21 AF)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	14048 -	253 =	13795	x .066 =	910.47 /	29.02 =	31	620
MED	14048 -	253 =	13795	x .108 =	1489.86 /	28.74 =	52	1040
M/E	14048 -	253 =	13795	x .014 =	193.13 /	30.17 =	6	120
WRI								
LGS	14048 -	253 =	13795	x .092 =	1269.14 /	23.69 =	54	1080
MED	14048 -	253 =	13795	x .160 =	2207.20 /	31.39 =	70	1400
N/C	14048 -	253 =	13795	x .076 =	1048.42 /	14.25 =	74	1480
CHS								
AFR	14048 -	253 =	13795	x .019 =	262.11 /	37.12 =	7	140
BDA	14048 -	253 =	13795	x .006 =	82.77 /	12.72 =	7	140
C/S	14048 -	253 =	13795	x .047 =	648.37 /	14.66 =	44	880
UK	14048 -	253 =	13795	x .078 =	1076.01 /	18.66 =	58	1160
COF								
AFR	14048 -	253 =	13795	x .049 =	675.96 /	25.90 =	26	520
NGU								
AFR	14048 -	253 =	13795	x .050 =	689.75 /	50.83 =	14	280
CARIB	14048 -	253 =	13795	x .025 =	344.88 /	10.66 =	32	640
MED	14048 -	253 =	13795	x .170 =	2345.15 /	32.70 =	72	1440
M/E	14048 -	253 =	13795	x .015 =	206.93 /	35.50 =	6	120
N/C	14048 -	253 =	13795	x .025 =	344.88 /	13.08 =	26	520
TOTAL CAPABILITY								11580

1. From Table 4.2
2. Based on 1.8% of scheduled channel hours (Table 4.2).
3. From Table 4.4 or Appendix C.
4. Based on 20 tons for C-141 sorties in 21 AF.

TABLE 4.7

FY 86 First Quarter MAI Airlift Capability in Tons  
Atlantic Region (21 AF)

C-5

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	3232	- 0	= 3232	x .273	= 882.34	/ 17.30	= 51	2550
MED	3232	- 0	= 3232	x .218	= 704.58	/ 27.15	= 26	1300
M/E	3232	- 0	= 3232	x .377	= 1218.46	/ 32.03	= 38	1900
NGU								
MED	3232	- 0	= 3232	x .132	= 426.62	/ 32.83	= 13	650
TIK								
GER <sup>5</sup>	2926	- 0	= 2926	x .515	= 1506.89	/ 30.15	= 50	<u>2250</u>
TOTAL CAPABILITY								8650

1. From Table 4.2.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is supported by Travis, which uses 22 AF channel hours.

The number of missions are multiplied by either 18 (22 AF) or 20 (21 AF) tons for C-141 aircraft and either 45 (22 AF) or 50 (21 AF) tons for C-5 aircraft. Finally the air capability for the MAIs are summed to produce total airlift capability for a particular region. Thus through a relatively simple process, scheduled channel flying hours are converted to airlift capability for a specific MAI.

Note as the model is applied to FY 86 that the independent variable is the scheduled channel flying hours. Also note that the constants in the model are the intra-theater percentages (Table 4.2), the MAI portions, the average mission length, and of course the tonnage the aircraft can haul (18 or 20, 45 or 50). These characteristics hold true when the model is applied to determine airlift capability for a future fiscal year (FY 87) except that the independent variable becomes planned channel hours as opposed to scheduled channel hours. This allows the model to be applied much earlier since planned channel hours are available usually six months to a year sooner than scheduled channel hours.

#### Model Validation for FY 86

Chapter Three mentioned that both the present methodology and the proposed model will be validated through the following formulas:

$$D / L = R \quad (10)$$

$$M / L = Z \quad (9)$$

where

- D = Average quarterly airlift capability for FY 86
- L = Actual quarterly airlift capability for FY 86
- R = Quotient (calculated for each quarter of FY) which indicates how closely D = L with 1.00 considered perfect accuracy
- M = Total quarterly airlift capability in cargo tons
- Z = Quotient (calculated for each quarter of FY) which indicates how closely M = L with 1.00 considered perfect accuracy

Before proceeding further, it is necessary to determine L (actual quarterly airlift capability for FY 86). This was accomplished in Appendix C when the other parameters of the model were determined. The actual airlift capability for FY 86 is summarized and presented in Tables 4.8, 4.9, and 4.10. It is not really necessary to break the actual airlift capability down into specific MAIs but since the information is available through Appendix C, it is presented to provide further insight into individual MAIs. All that is really necessary is actual quarterly airlift capability for a particular region because both models can only be compared on a quarterly basis, so this circumstance should be kept in mind when determining the accuracy of each model.

Now that the quantity L is known, the present methodology and the proposed model can be validated for accuracy. Table 4.11 presents the accuracy scores, with 1.000 considered perfect accuracy, by applying formulas nine and ten on the previous page. As expected, the proposed model was very accurate at translating flying hours into airlift capability. This is because the model was built using FY 86 data, however, this circumstance does not diminish the importance of applying the model to FY 86 to ensure its accuracy. Note in Table 4.11 how the present methodology tends to overstate actual capability for the Pacific Region (22 AF) and understate actual capability for the Atlantic (21 AF). Apparently the month of August, 1986 may not be as good a month for calculating an average as perhaps some other month. It might even be appropriate to use one month for the Pacific Region and a different month for the Atlantic Region. Another interesting discovery was that airlift capability for the C-5 MAI TIK - GER was inadvertently included in the Pacific Region rather than the Atlantic Region. Correcting for this circumstance would reduce

TABLE 4.8

FY 86 Actual Scheduled Airlift Capability in Tons<sup>1</sup>  
Pacific Region (22 AF)

C-141

MAI	QTR 1	QTR 2	QTR 3	QTR 4
TCM				
ALA	972	936	990	1170
NPAC	954	1080	1206	1116
SBD				
CPAC	234	234	234	234
SPAC	234	234	234	234
SUU				
CPAC	4158	4086	4860	4581
NPAC	0	0	72	207
TOTAL CAPABILITY	<u>6552</u>	<u>6570</u>	<u>7596</u>	<u>7542</u>

C-5

MAI	QTR 1	QTR 2	QTR 3	QTR 4
SUU				
CPAC	1665	1868	2655	2678
NPAC	607	472	405	607
TOTAL CAPABILITY	<u>2272</u>	<u>2340</u>	<u>3060</u>	<u>3285</u>

1. From Appendix C.

TABLE 4.9

FY 86 Actual Scheduled Airlift Capability in Tons<sup>1</sup>  
Atlantic Region (21 AF)

C-141

MAI	QTR 1	QTR 2	QTR 3	QTR 4
DOV				
GER	630	490	390	390
MED	1040	680	440	100
MED (from TCM)	0	0	18	54
MED (from SBD)	0	0	18	36
MED (from SUU)	0	0	36	36
M/E	130	130	130	130
M/E (from TCM)	0	0	18	90
M/E (from SBD)	0	0	18	72
M/E (from SUU)	0	0	36	72
WRI				
LGS	1070	1090	1100	1090
MED	1410	1910	2050	1800
MED (from TCM)	0	0	18	18
MED (from SBD)	0	0	36	18
MED (from SUU)	0	0	18	36
N/C	1480	1400	1490	1610
CHS				
AFR	140	120	120	120
BDA	120	120	120	140
C/S	880	860	920	900
UK	1160	1240	1220	1260
COF				
AFR	520	500	500	520
NGU				
AFR	270	300	290	160
CARIB	640	640	640	640
MED	1430	1450	1670	1350
M/E	120	130	80	130
N/C	520	500	700	520
TOTAL CAPABILITY	11560	11560	12076	11292

1. From Appendix C.

TABLE 4.10

FY 86 Actual Scheduled Airlift Capability in Tons<sup>1</sup>  
Atlantic Region (21 AF)

		<u>C-5</u>			
		QTR 1	QTR 2	QTR 3	QTR 4
MAI					
DOV					
	GER	2550	2150	3150	3550
	MED	1300	1250	1500	2350
	M/E	1900	1700	1150	650
NGU					
	MED	650	650	750	700
CHS					
	C/S	0	0	250	350
COF					
	AFR	0	0	50	0
TIK					
	GER (from SUU)	<u>2250</u>	<u>1710</u>	<u>990</u>	<u>1170</u>
	TOTAL CAPABILITY	<u>8650</u>	<u>7460</u>	<u>7840</u>	<u>8770</u>

1. From Appendix C.

TABLE 4.11

Model Accuracy for FY 86<sup>1</sup>  
Pacific Region (22 AF)

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
Present Methodology	1.220	1.216	1.052	1.060
Model	1.000	1.000	1.000	1.002

C-5

Present Methodology	1.842	1.788	1.368	1.274
Model	0.990	1.019	1.000	1.000

Atlantic Region (21 AF)

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
Present Methodology	0.898	0.898	0.860	0.919
Model	1.002	1.000	1.002	1.004

C-5

Present Methodology	0.815	0.945	0.899	0.804
Model	1.000	1.000	1.000	1.000

1. From Appendix E.

the overstatement of C-5 airlift capability by approximately 20 percent for each quarter in the Pacific Region and increase corresponding capability in the Atlantic Region approximately 20 percent. A graphic illustration of Table 4.11 is presented in Figures One through Four. It is perhaps better to compare the two different models with actual airlift capability using the figures in conjunction with Table 4.11 as the figures tend to make it easier to perceive overstatements and understatements of actual airlift capability. Now that the accuracy of the proposed model is known to be better than the present methodology for FY 86, the proposed model must be validated against FY 87 (a new set of data) to learn if it could be useful in future applications.

#### Model Validation for FY 87

The same approach used for validating the proposed model against FY 86 data will be used for FY 87. The proposed model and the present methodology will again be validated through the following formulas:

$$M / L = Z \quad (9)$$

$$D / L = R \quad (10)$$

where

- M = Total quarterly airlift capability in cargo tons
- L = Actual quarterly airlift capability for FY 87
- Z = Quotient (calculated for each quarter of FY) which indicates how closely M = L with 1.00 considered perfect accuracy
- D = Average quarterly airlift capability for FY 86
- R = Quotient (calculated for each quarter of FY) which indicates how closely D = L with 1.00 considered perfect accuracy

The parameter M is calculated by applying the proposed model to FY 87 data and is presented in Appendix G. The planned channel flying hours for FY 87 necessary to begin applying the proposed model are listed in

# C-141

22 AF

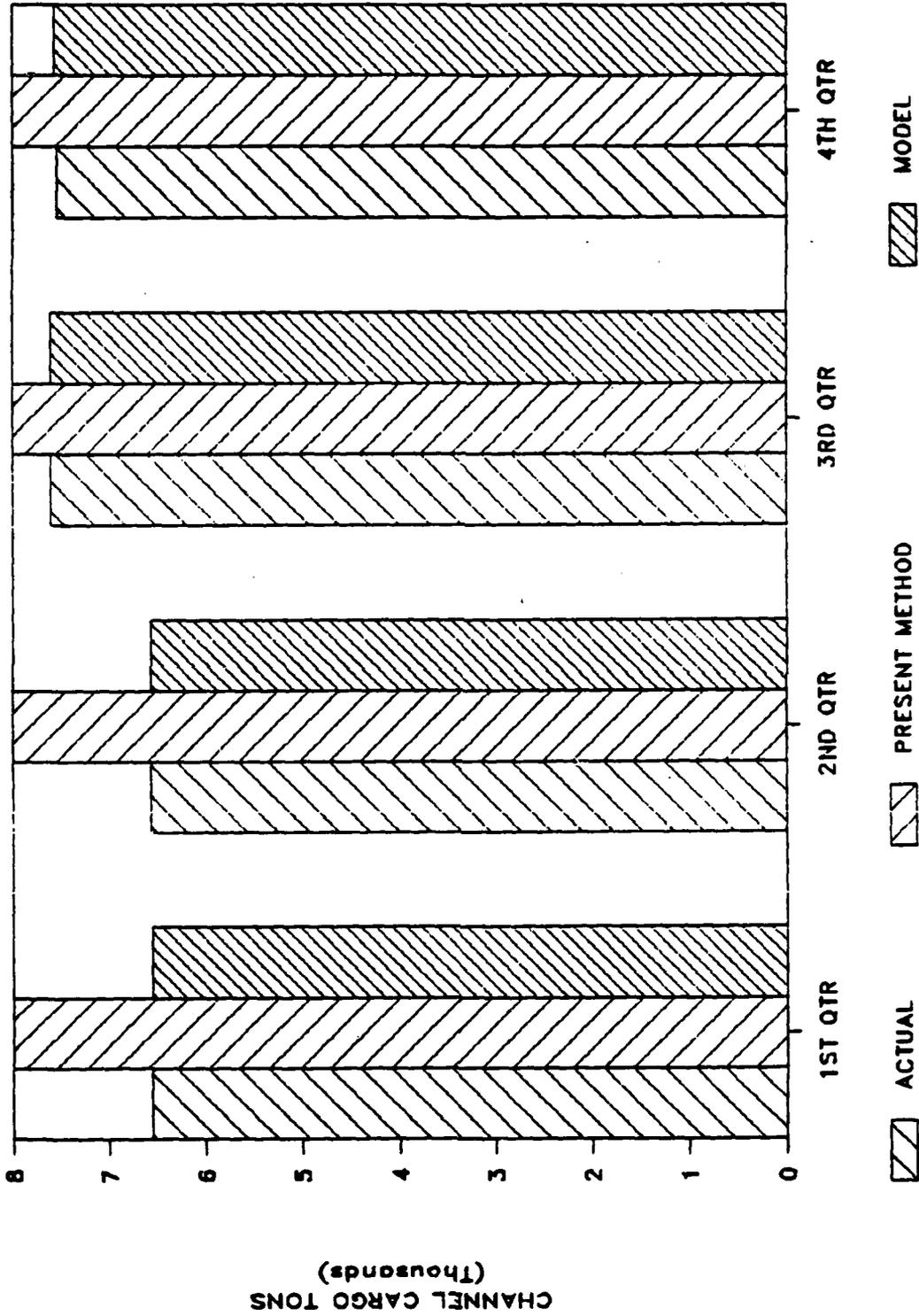


Figure 1. Model Accuracy for FY 86 (22 AF C-141)

**C-5**  
22 AF

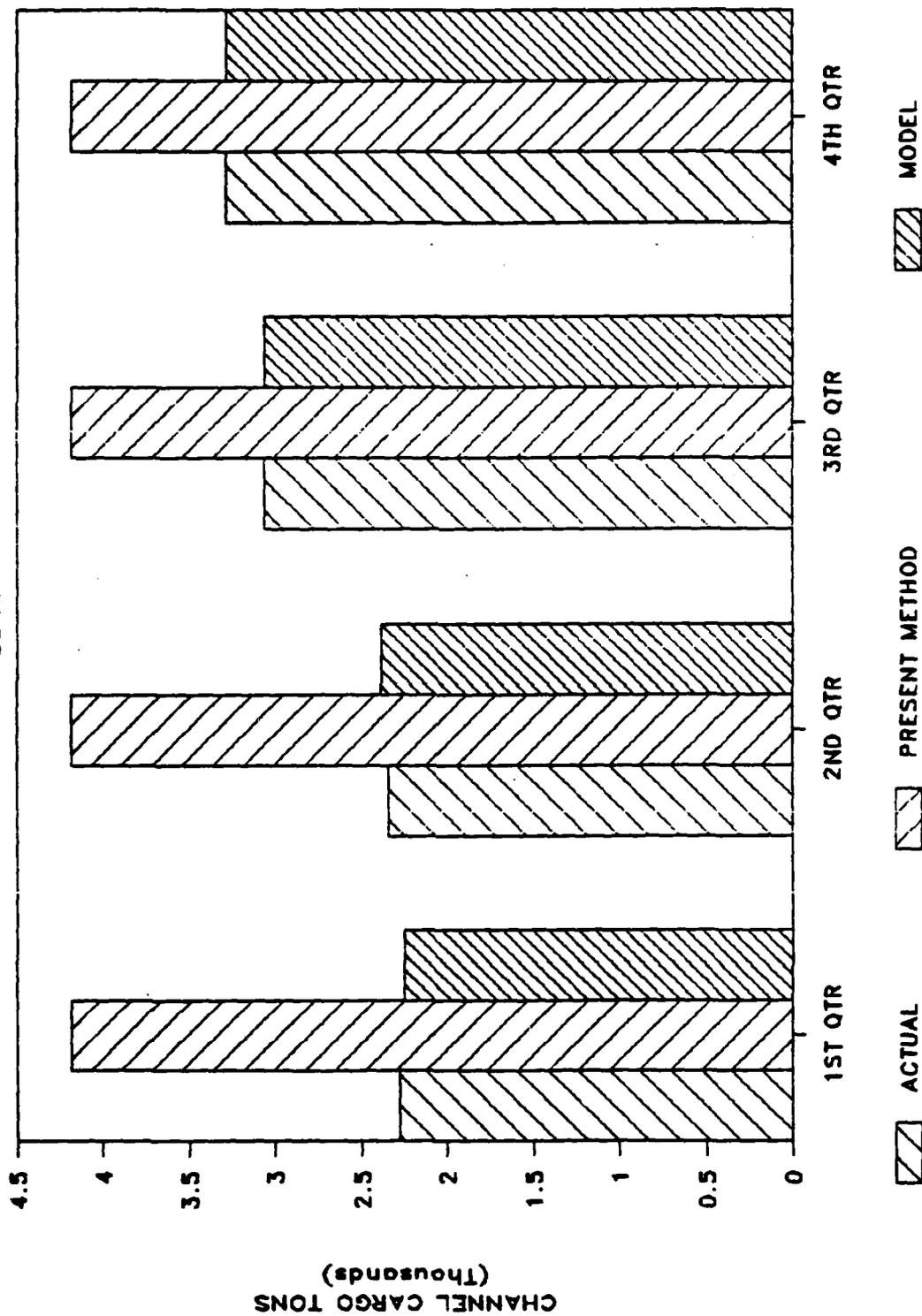


Figure 2. Model Accuracy for FY 86 (22 AF C-5)

# C-141

21 AF

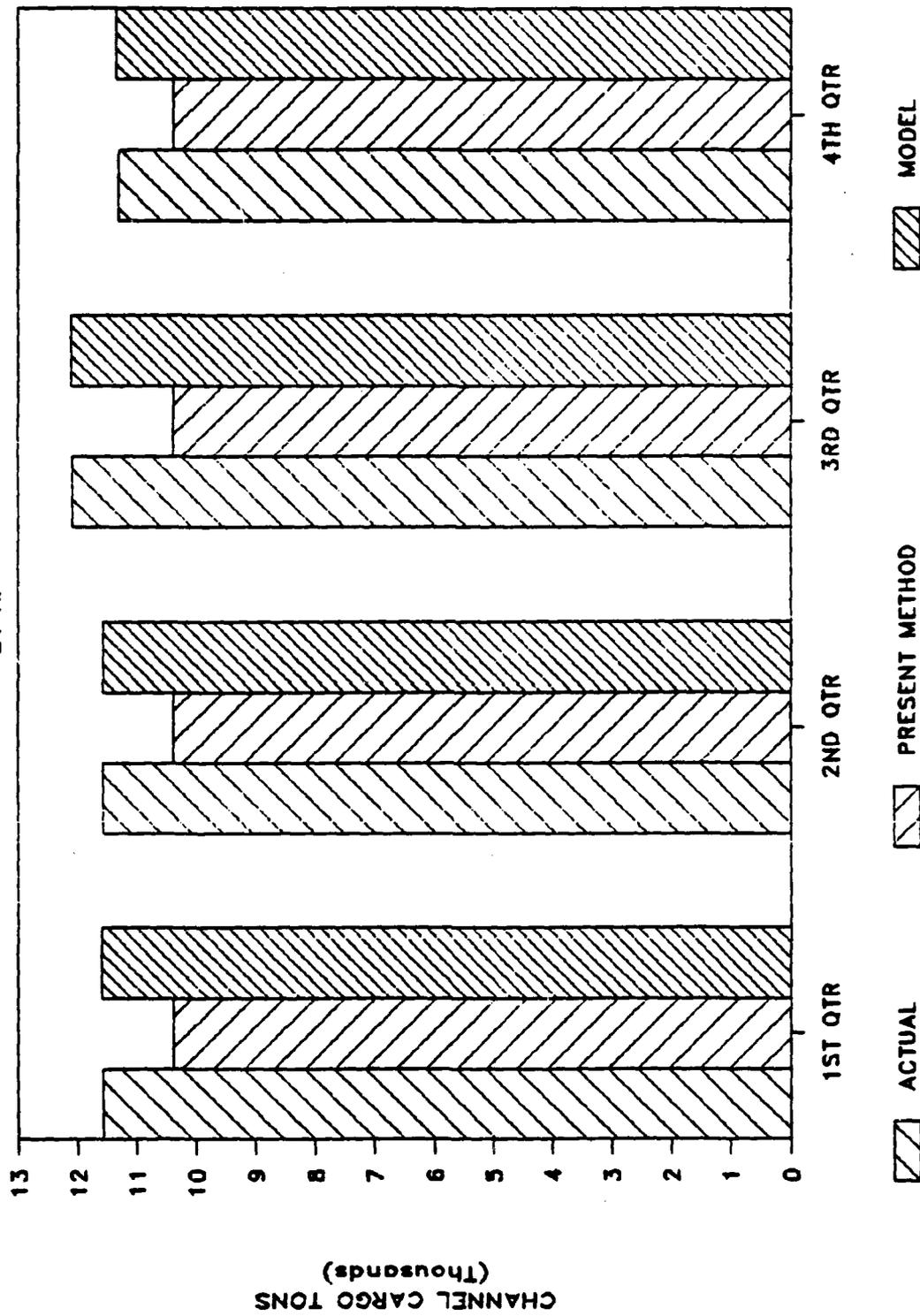


Figure 3. Model Accuracy for FY 86 (21 AF C-141)

**C-5**  
21 AF

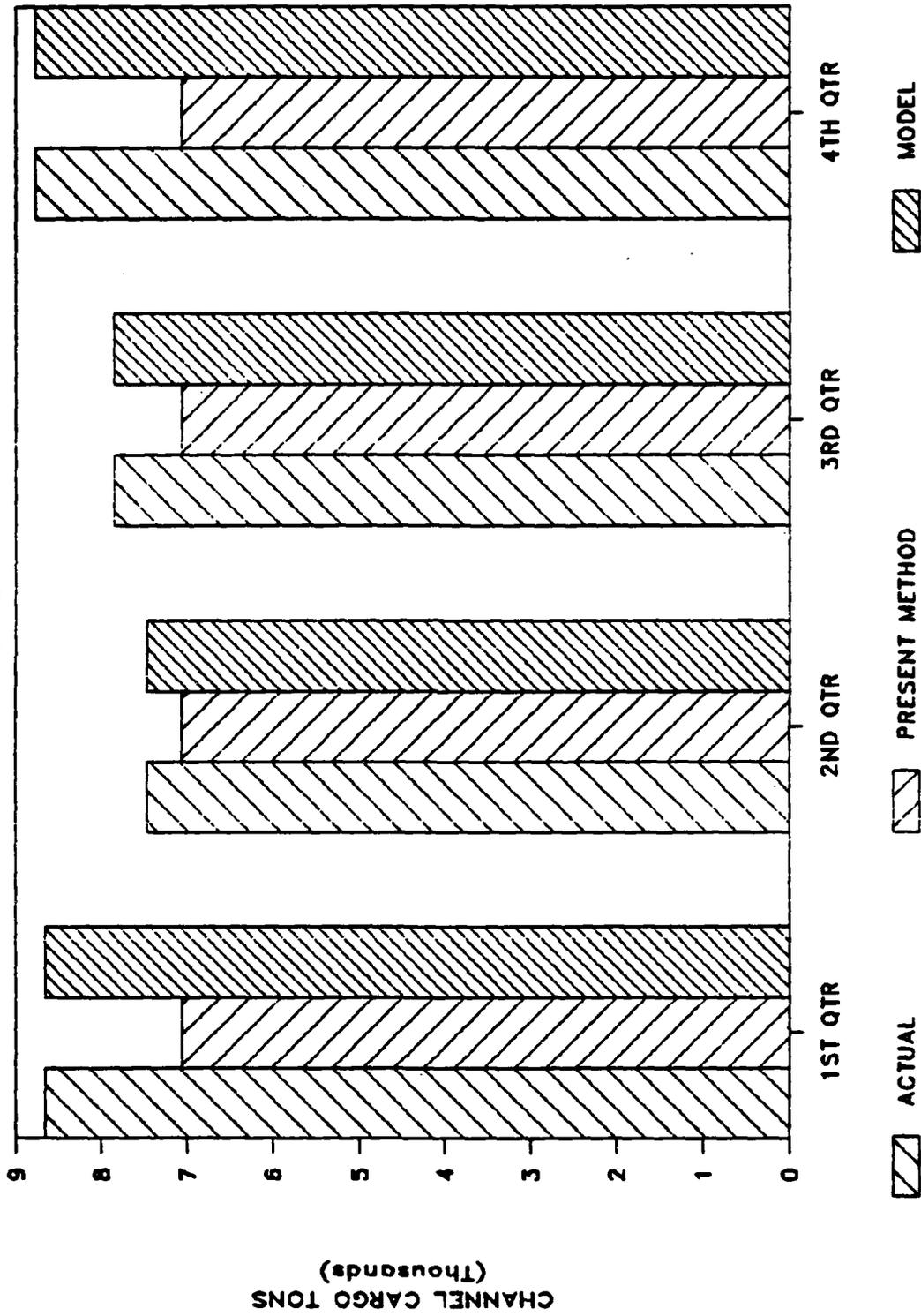


Figure 4. Model Accuracy for FY 86 (21 AF C-5)

Appendix F. The parameter L (actual quarterly airlift capability for FY 87) is determined by counting the number of scheduled channel sorties for each region and multiplying the sorties by the appropriate cargo tonnage the aircraft can haul. Tables 4.12 and 4.13 present the actual scheduled airlift capability for FY 87.

Now that the quantity L is known for FY 87, the present methodology and the proposed model can be validated for accuracy against FY 87. Table 4.14 presents the accuracy scores, with 1.000 considered perfect accuracy, by applying formulas nine and ten against FY 87. As expected, the proposed model was not as accurate at translating flying hours into airlift capability as it was for FY 86. One possible reason is because the scheduled channel hours for FY 86 are not equal to the planned scheduled channel hours for FY 87. This is evident in Table 4.15 where the greatest percentage change in channel hours appears to be in the third and fourth quarters. It is also evident by inspecting Tables 4.15 and 4.16 that a reduction in channel hours from one year to the next does not necessarily mean an equivalent reduction in airlift capability. For example, third quarter C-5 channel hours for the 22 AF increases eight percent from FY 86 to FY 87 while corresponding airlift capability decreases 21 percent. This suggests that not all planned channel hours are used for channel cargo requirements. These channel hours may have been diverted for some other purpose. Put in other words, planned scheduled channel hours for FY 87 do not necessarily equal scheduled channel hours for FY 87. Yet the model uses planned scheduled channel hours so that it may be applied six to eight months earlier than when scheduled hours become available. This is a key aspect of the usefulness of the model as it is designed for use against upcoming fiscal years.

TABLE 4.12

FY 87 Actual Scheduled Airlift Capability in Tons  
Pacific Region (22 AF) (Appendix H)

C-141

MONTH	QTR 1	QTR 2	QTR 3	QTR 4
October	2286			
November	2142			
December	<u>2250</u>			
QUARTERLY CAPABILITY	6678			
January		2214		
February		2016		
March		<u>2250</u>		
QUARTERLY CAPABILITY		6480		
April			2232	
May			2196	
June			<u>2160</u>	
QUARTERLY CAPABILITY			6588	
July				2286
August				2214
September				<u>2160</u>
QUARTERLY CAPABILITY				6660

C-5

October	810			
November	765			
December	<u>495</u>			
QUARTERLY CAPABILITY	2070			
January		855		
February		720		
March		<u>585</u>		
QUARTERLY CAPABILITY		2160		
April			855	
May			855	
June			<u>720</u>	
QUARTERLY CAPABILITY			2430	
July				810
August				765
September				<u>720</u>
QUARTERLY CAPABILITY				2295

TABLE 4.13

FY 87 Actual Scheduled Airlift Capability in Tons  
Atlantic Region (21 AF) (Appendix H)

C-141

MONTH	QTR 1	QTR 2	QTR 3	QTR 4
October	3940			
November	3540			
December	<u>3460</u>			
QUARTERLY CAPABILITY	10940			
January		3620		
February		3320		
March		<u>3520</u>		
QUARTERLY CAPABILITY		10460		
April			3520	
May			3616	
June			<u>3494</u>	
QUARTERLY CAPABILITY			10630	
July				3800
August				3620
September				<u>3560</u>
QUARTERLY CAPABILITY				10980

C-5

October	3000			
November	2210			
December	<u>2010</u>			
QUARTERLY CAPABILITY	7220			
January		2310		
February		2160		
March		<u>2360</u>		
QUARTERLY CAPABILITY		6830		
April			2355	
May			2360	
June			<u>2320</u>	
QUARTERLY CAPABILITY			7035	
July				2450
August				2320
September				<u>2075</u>
QUARTERLY CAPABILITY				6845

TABLE 4.14

Model Accuracy for FY 87<sup>1</sup>  
Pacific Region (22 AF)

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
Present Methodology	1.197	1.233	1.213	1.200
Model	0.965	1.033	1.033	1.024

C-5

Present Methodology	2.022	1.938	1.722	1.824
Model	1.000	1.104	1.370	1.314

Atlantic Region (21 AF)

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
Present Methodology	0.949	0.992	0.976	0.945
Model	0.987	0.998	1.034	1.054

C-5

Present Methodology	0.976	1.032	1.002	1.030
Model	1.083	1.048	1.042	1.115

1. From Appendix E.

TABLE 4.15

Comparison of Channel Hours <sup>1</sup>  
Pacific Region (22 AF)

	<u>C-141</u>			
	QTR 1	QTR 2	QTR 3	QTR 4
FY 86 (Scheduled Channel Hours)	16290	15312	17734	17726
FY 87 (Planned Channel Hours)	16042	15674	15857	16042
Percentage Change <sup>2</sup>	-2	+2	-11	-10

	<u>C-5</u>			
FY 86 (Scheduled Channel Hours)	2926	2644	2488	2947
FY 87 (Planned Channel Hours)	2710	2661	2690	2710
Percentage Change <sup>2</sup>	-7	+1	+8	-8

## Atlantic Region (21 AF)

	<u>C-141</u>			
	QTR 1	QTR 2	QTR 3	QTR 4
FY 86 (Scheduled Channel Hours)	14048	14205	14271	12726
FY 87 (Planned Channel Hours)	13095	12835	12945	13095
Percentage Change <sup>2</sup>	-7	-10	-9	+3

	<u>C-5</u>			
FY 86 (Scheduled Channel Hours)	3232	2935	3179	3364
FY 87 (Planned Channel Hours)	2910	2781	2900	2900
Percentage Change <sup>2</sup>	-10	-5	-9	-14

1. From Table 4.2 and Appendix F. There is a 5.6% decrease in total channel hours from FY 86 to FY 87.
2. Percentage change from FY 86 to FY 87. Rounded to nearest whole number.

TABLE 4.16

Comparison of Actual Scheduled Airlift Capability in Tons<sup>1</sup>  
Pacific Region (22 AF)

	<u>C-141</u>			
	QTR 1	QTR 2	QTR 3	QTR 4
FY 86 (Actual Scheduled Air Cap)	6552	6570	7596	7542
FY 87 (Actual Scheduled Air Cap)	6678	6480	6588	6660
Percentage Change <sup>2</sup>	+2	-1	-13	-12

	<u>C-5</u>			
FY 86 (Actual Scheduled Air Cap)	2272	2340	3060	3285
FY 87 (Actual Scheduled Air Cap)	2070	2160	2430	2295
Percentage Change <sup>2</sup>	-9	-8	-21	-30

Atlantic Region (21 AF)

	<u>C-141</u>			
	QTR 1	QTR 2	QTR 3	QTR 4
FY 86 (Actual Scheduled Air Cap)	11560	11560	12076	11292
FY 87 (Actual Scheduled Air Cap)	10940	10460	10630	10980
Percentage Change <sup>2</sup>	-5	-10	-12	-3

	<u>C-5</u>			
FY 86 (Actual Scheduled Air Cap)	8650	7460	7840	8770
FY 87 (Actual Scheduled Air Cap)	7220	6830	7035	6845
Percentage Change <sup>2</sup>	-17	-8	-10	-22

1. From Tables 4.8, 4.9, 4.10, 4.12, and 4.13. There is a 10.2% decrease in total airlift capability from FY 86 to FY 87.
2. Percentage change from FY 86 to FY 87. Rounded to nearest whole number.

Notice in Tables 4.15 and 4.16 that as the difference between corresponding percentage changes increases, the greater the error in the accuracy scores found in Table 4.14. This is readily apparent by examining the third and fourth quarters of the C-5 portion of the Pacific Region. For example, the fourth quarter C-5 percentage change in the Pacific Region for channel hours is -8 while the corresponding change in airlift capability is -30. Notice when the difference (22) is this large, the effect on the corresponding accuracy score (1.314) is easier to detect. Also notice that if the difference between corresponding percentage changes in Tables 4.15 and 4.16 is small, the accuracy score is relatively close to the perfect score (1.000). The assumption being made is that planned channel hours are relatively close to scheduled channel hours for a given fiscal year. If the planned channel hours are diverted for some other purpose, then the accuracy of the model is degraded since it converts planned channel hours into airlift capability.

Table 4.14 can be used in conjunction with Figures Five through Eight to compare the performance of the proposed model with the present methodology. For the Pacific Region, the proposed model performed well against the present methodology. The present methodology tended to overstate C-141 and especially C-5 airlift capability for the same reason it overstated in FY 86 -- the C-5 MAI TIK - GER was inadvertently included in the Pacific Region rather than the Atlantic Region. Correcting for this circumstance would reduce (thus improve) 22 AF C-5 accuracy scores approximately 20 percent.

In the Atlantic Region the present methodology performed much better against the proposed model. Both models were approximately equal in calculating C-141 airlift capability, but the present methodology was

**C-141**  
22 AF

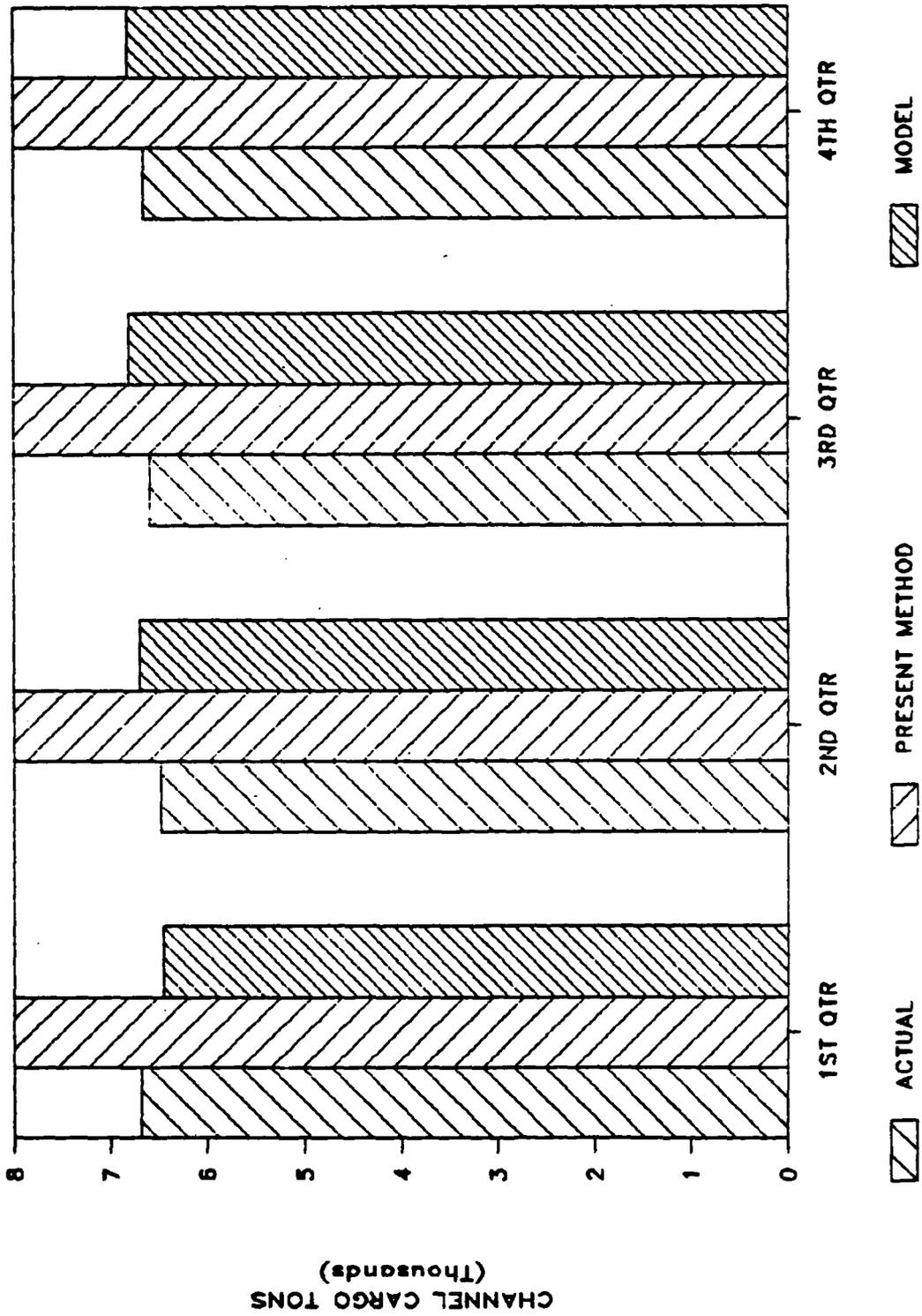


Figure 5. Model Accuracy for FY 87 (22 AF C-141)

# C-5

22 AF

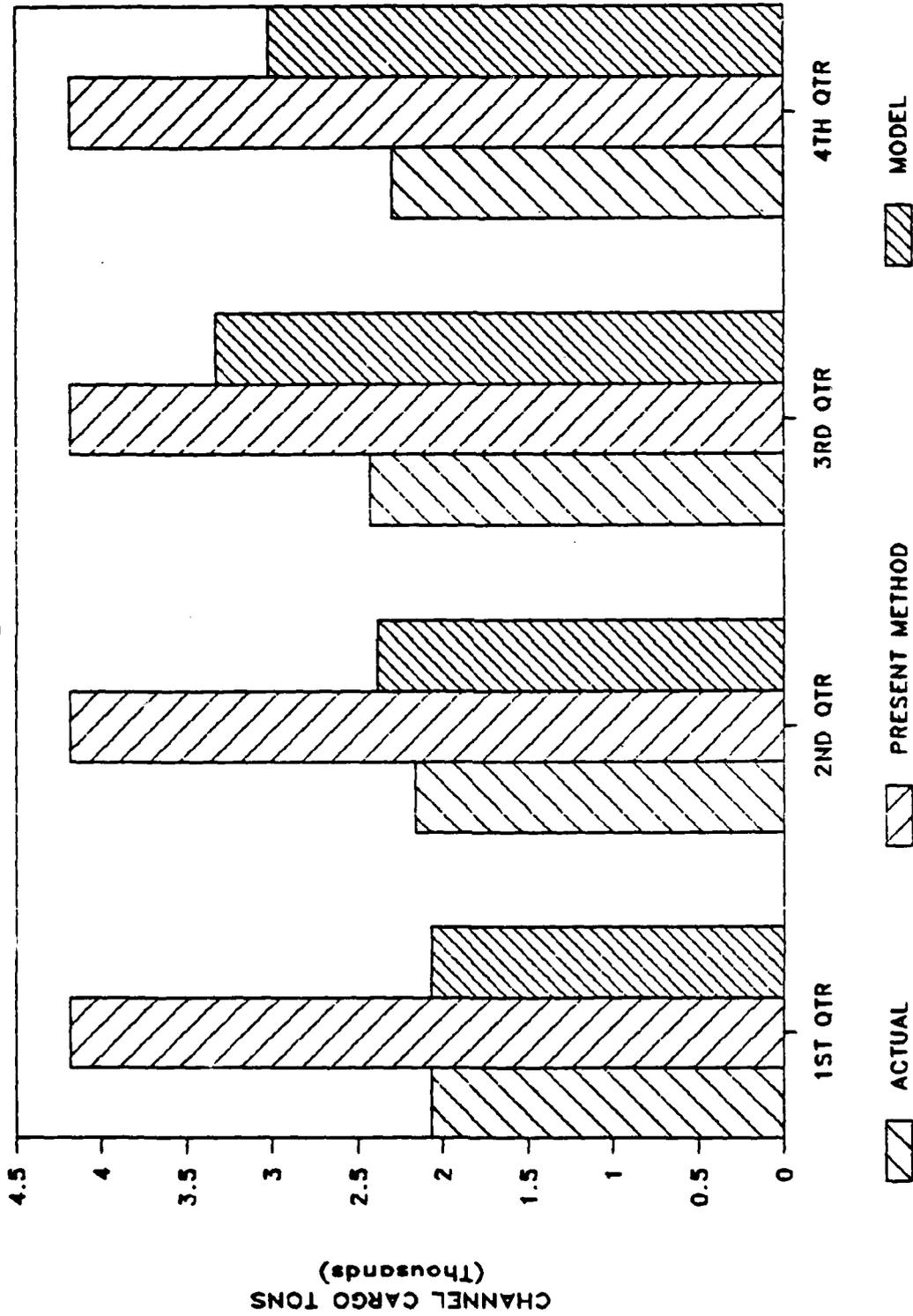


Figure 6. Model Accuracy for FY 87 (22 AF C-5)

# C-141

21 AF

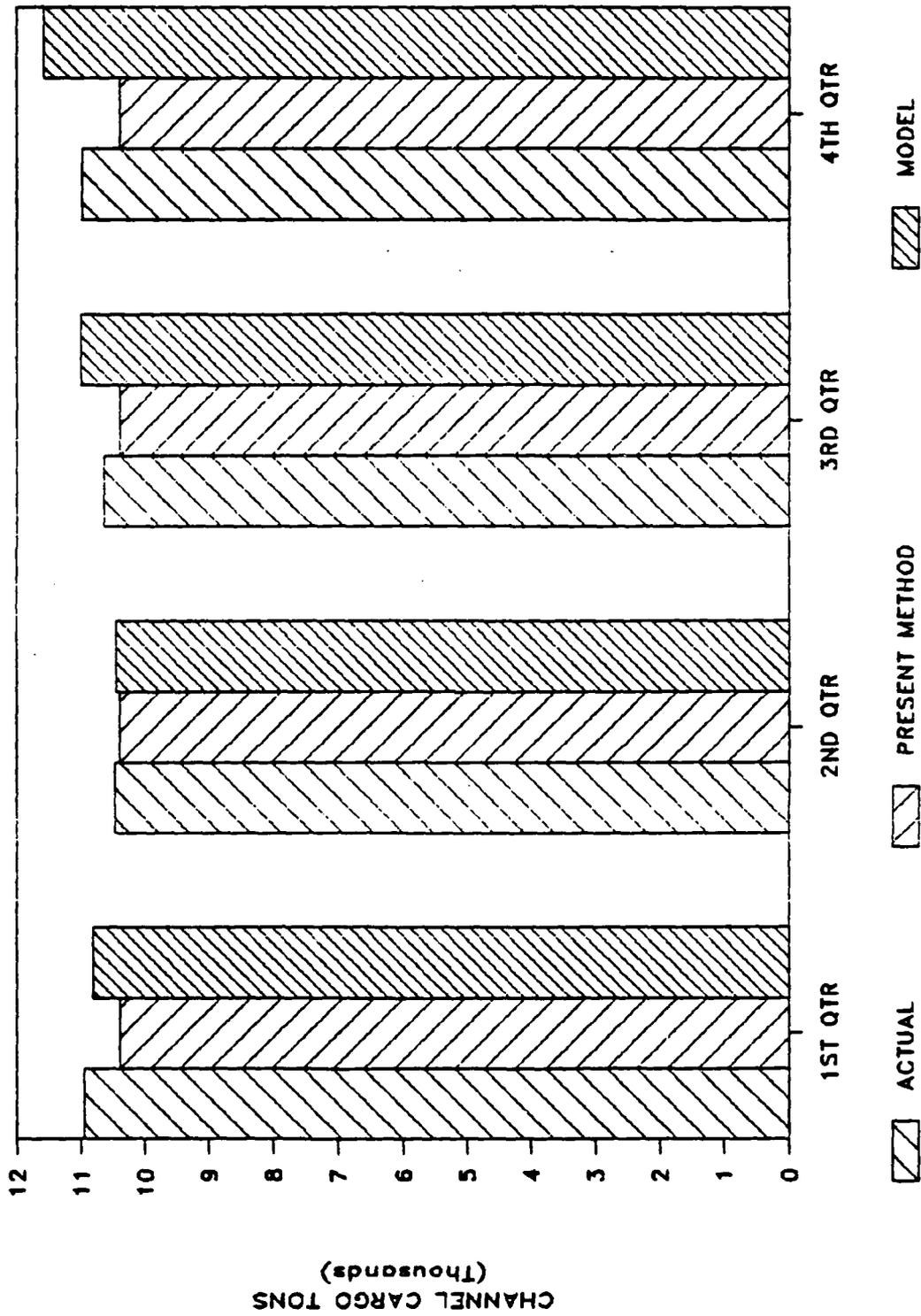


Figure 7. Model Accuracy for FY 87 (21 AF C-141)

**C-5**  
21 AF

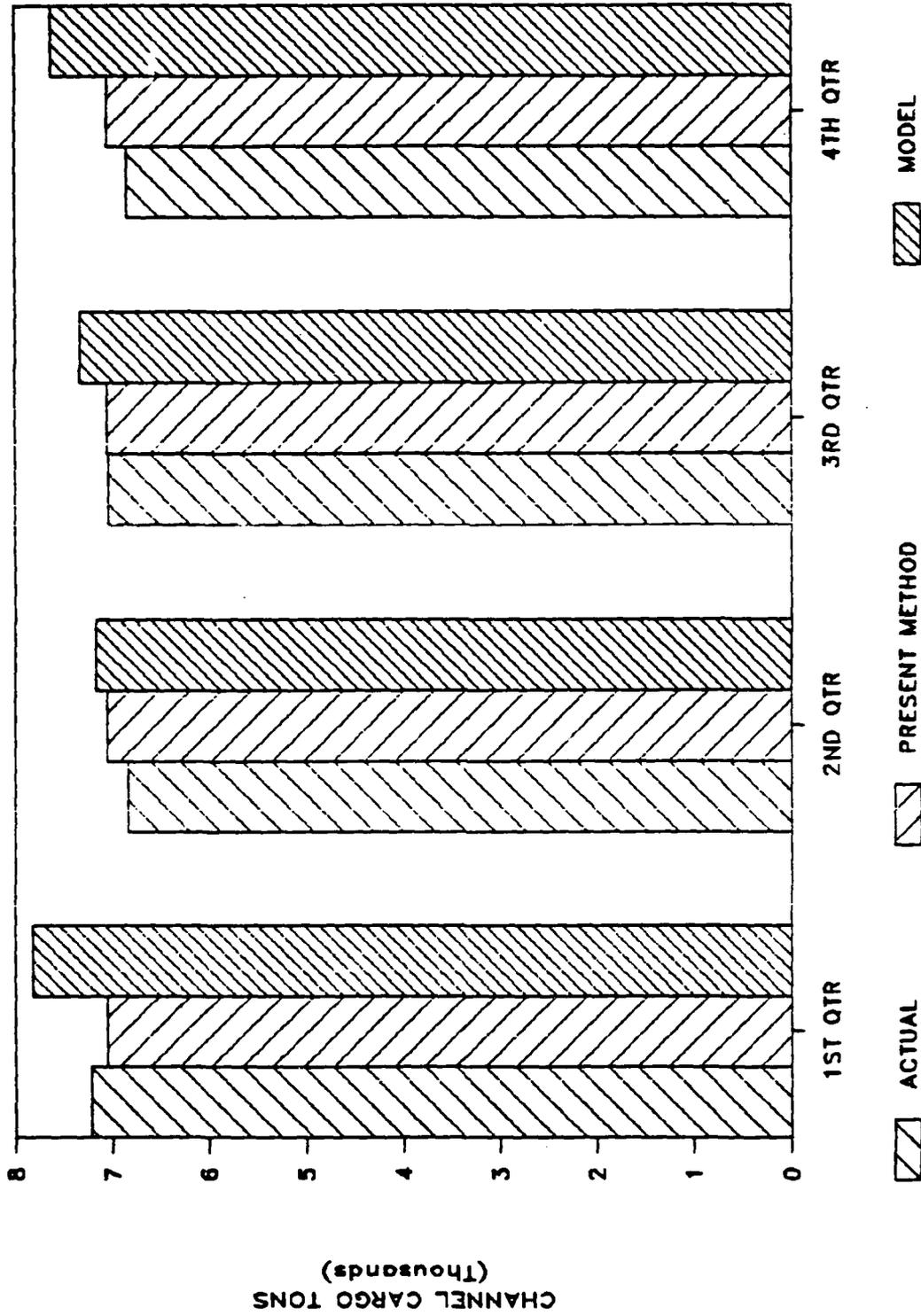


Figure 8. Model Accuracy for FY 87 (21 AF C-5)

slightly more accurate than the proposed model in calculating C-5 airlift capability. The proposed model overstated C-5 airlift capability because of the greater percentage change in airlift capability (Table 4.16) than channel hours (Table 4.15). This degraded the accuracy of the proposed model for the reasons mentioned on page 55.

In order to better compare the present methodology with the proposed model for FY 87, Table 4.17 presents the absolute percentage errors of both models. The absolute percentage error is the absolute deviation from the perfect score of 1.000 for each model and seems appropriate in this circumstance as an absolute percentage error will not allow positive and negative percentage errors to cancel each other. An equal penalty is assessed for understating as well as overstating airlift capability. As can be seen in Table 4.17, the proposed model performs much better overall than the present methodology. Now that the proposed model is known to be more accurate at calculating airlift capability for FY 87 than the present methodology, the model can be applied against cargo forecasts for FY 87 to determine a surplus or shortage of airlift capability.

#### Model Application for FY 87

Recall that in Chapter Three the following formula was presented for determining a surplus or shortage of airlift capability for a given MAI:

$$M - F = U \text{ or } V \quad (8)$$

where

- M = Total quarterly airlift capability in cargo tons
- F = Total quarterly MAI cargo tonnage forecast
- U = MAI shortage of airlift capability
- V = MAI surplus of airlift capability

TABLE 4.17

Absolute Percentage Error Comparison For FY 87<sup>1</sup>  
Pacific Region (22 AF)

C-141

	<u>Present Methodology</u>	<u>Model</u>
Quarter 1	19.7	3.5
Quarter 2	23.3	3.3
Quarter 3	21.3	3.3
Quarter 4	20.0	2.4

C-5

Quarter 1	102.2	0.0
Quarter 2	93.8	10.4
Quarter 3	72.2	37.0
Quarter 4	<u>82.4</u>	<u>31.4</u>
TOTAL ABSOLUTE ERROR	434.9	91.3

Atlantic Region (21 AF)

C-141

	<u>Present Methodology</u>	<u>Model</u>
Quarter 1	5.1	1.3
Quarter 2	0.8	0.2
Quarter 3	2.4	3.4
Quarter 4	5.5	5.4

C-5

Quarter 1	2.4	8.3
Quarter 2	3.2	4.8
Quarter 3	0.2	4.2
Quarter 4	<u>3.0</u>	<u>11.5</u>
TOTAL ABSOLUTE ERROR	22.6	39.1

GRAND TOTAL ABSOLUTE ERROR      457.5                      130.4

1. The absolute percentage errors were calculated by taking the absolute difference of the accuracy scores (Table 4.14) and the perfect score (1.000).

The parameter M (total quarterly airlift capability in cargo tons) was determined in Appendix G. Parameter F (total quarterly MAI cargo tonnage forecast) needs to be determined at this time. Quarterly cargo forecasts for each MAI are found in the Annual Airlift Requirements - Service Consolidation document published by HQ MAC/TRKC. Table 4.18 presents the cargo forecasts for two MAIs while the remaining forecasts are found in Appendix I. Now that quantity F is known, a surplus or shortage for each MAI can be calculated. Tables 4.19, 4.20, 4.21, and 4.22 present the MAIs with each associated surplus or shortage.

The overriding trend in Tables 4.19 through 4.22 is the shortage of airlift capability for the majority of MAIs. Of the 22 MAIs listed, 12 indicate shortages, and some of the shortages are quite large. In the Pacific Region (22 AF) the largest shortages appear to be with the MAIs TCM - NPAC and SUU - NPAC. This indicates a potential for acquiring commercial airlift to move the excess cargo tonnage. Also there is the possibility of utilizing the surplus capability of the MAI SUU - CPAC to help offset the shortages.

In the Atlantic Region (21 AF) the most noticeable shortages are with the MAIs DOV - GER, CHS - C/S, and CHS - UK. These MAIs indicate a potential for commercial airlift. For the MAI DOV - GER, the excess in DOV - MED could be used to help offset the shortage, but commercial airlift would be necessary to offset the remaining deficit. The excess in DOV - M/E could be used against DOV - GER or NGU - M/E. As can be seen, there are many ways to shift excess capability to meet indicated shortages by the model. The idea is to shift the excess airlift capability to meet the shortages. If this is accomplished, then the model should be of tremendous value to MAC when negotiating long-range, commercial-buy

TABLE 4.18

FY 87 Channel Cargo Forecasts<sup>1</sup>  
Pacific Region (22 AF)

FROM MC CHORD (TCM) TO:	QTR 1	QTR 2	QTR 3	QTR 4
Alaska (ALA)				
ADK	438	420	441	417
EDF	651	603	672	528
EIL	300	309	381	246
SYA	39	36	48	51
EDF (from DOV)	30	12	12	24
TOTAL FOR MAI TCM - ALA	1458	1380	1554	1266
North Pacific (NPAC)				
FUK	21	21	21	21
IWA	99	84	87	105
KUZ	255	210	183	126
KWJ	30	18	0	3
MSJ	168	186	222	99
OKO	819	804	789	717
OSN	735	822	804	501
TAE	123	141	84	108
TOTAL FOR MAI TCM - NPAC	2250	2286	2190	1680

1. From the Annual Airlift Requirements - Service Consolidation document for FY 87.

TABLE 4.19

FY 87 Airlift Capability Surplus (Shortage) in Tons  
Pacific Region (22 AF)

MAI	QTR 1	QTR 2	QTR 3	QTR 4
TCM - ALA				
Airlift Capability <sup>1</sup>	954	954	882	1062
Cargo Forecast <sup>2</sup>	<u>1458</u>	<u>1380</u>	<u>1554</u>	<u>1266</u>
Surplus (Shortage)	(504)	(426)	(672)	(204)
TCM - NPAC				
Airlift Capability <sup>1</sup>	936	1098	1080	1008
Cargo Forecast <sup>2</sup>	<u>2250</u>	<u>2286</u>	<u>2190</u>	<u>1680</u>
Surplus (Shortage)	(1314)	(1188)	(1110)	(672)
SBD - CPAC				
Airlift Capability <sup>1</sup>	234	234	216	216
Cargo Forecast <sup>2</sup>	<u>792</u>	<u>765</u>	<u>777</u>	<u>843</u>
Surplus (Shortage)	(558)	(531)	(561)	(627)
SBD - SPAC				
Airlift Capability <sup>1</sup>	234	234	216	216
Cargo Forecast <sup>2</sup>	<u>654</u>	<u>468</u>	<u>537</u>	<u>573</u>
Surplus (Shortage)	(420)	(234)	(321)	(357)
SUU - CPAC				
Airlift Capability <sup>3</sup>	5616	6066	7218	6615
Cargo Forecast <sup>2</sup>	<u>5508</u>	<u>5292</u>	<u>5670</u>	<u>5649</u>
Surplus (Shortage)	108	774	1548	966
SUU - NPAC				
Airlift Capability <sup>3</sup>	540	495	522	720
Cargo Forecast <sup>2</sup>	<u>2496</u>	<u>2502</u>	<u>2769</u>	<u>2799</u>
Surplus (Shortage)	(1956)	(2007)	(2247)	(2079)

1. From Appendix G.
2. From Table 4.18 or Appendix I.
3. Airlift capability is computed by adding C-5 and C-141 capability from Appendix G.

TABLE 4.20

FY 87 Airlift Capability Surplus (Shortage) in Tons  
Atlantic Region (21 AF)

MAI	QTR 1	QTR 2	QTR 3	QTR 4
DOV - GER				
Airlift Capability <sup>1</sup>	4950	4200	4340	4530
Cargo Forecast <sup>2</sup>	<u>13668</u>	<u>14196</u>	<u>14103</u>	<u>13833</u>
Surplus (Shortage)	(8718)	(9996)	(9763)	(9303)
DOV - MED				
Airlift Capability <sup>3</sup>	2110	1820	1822	2276
Cargo Forecast <sup>2</sup>	<u>735</u>	<u>723</u>	<u>816</u>	<u>753</u>
Surplus (Shortage)	1375	1097	1006	1523
DOV - M/E				
Airlift Capability <sup>3</sup>	1820	1720	1242	888
Cargo Forecast <sup>2</sup>	<u>723</u>	<u>777</u>	<u>813</u>	<u>747</u>
Surplus (Shortage)	1097	943	429	141
WRI - LGS				
Airlift Capability <sup>4</sup>	1000	980	1000	1120
Cargo Forecast <sup>2</sup>	<u>738</u>	<u>807</u>	<u>720</u>	<u>699</u>
Surplus (Shortage)	262	173	280	421
WRI - MED				
Airlift Capability <sup>3</sup>	1320	1720	1932	1932
Cargo Forecast <sup>2</sup>	<u>1080</u>	<u>1152</u>	<u>1137</u>	<u>1167</u>
Surplus (Shortage)	240	568	795	765
WRI - N/C				
Airlift Capability <sup>4</sup>	1380	1260	1360	1640
Cargo Forecast <sup>2</sup>	<u>1671</u>	<u>1587</u>	<u>2133</u>	<u>1425</u>
Surplus (Shortage)	(291)	(327)	(773)	215

1. Airlift capability is computed by adding C-5 and C-141 capability from Appendix G. The MAI TIK - GER for C-5 aircraft is included.
2. From Appendix I.
3. Airlift capability is computed by adding C-5 and C-141 capability from Appendix G. 22 AF support (TCM, SBD, and SUU) for this MAI is included.
4. From Appendix G.

TABLE 4.21

FY 87 Airlift Capability Surplus (Shortage) in Tons (Continued)  
Atlantic Region (21 AF)

MAI	QTR 1	QTR 2	QTR 3	QTR 4
CHS - AFR				
Airlift Capability <sup>1</sup>	140	100	100	120
Cargo Forecast <sup>2</sup>	<u>48</u>	<u>69</u>	<u>60</u>	<u>54</u>
Surplus (Shortage)	92	31	40	66
CHS - BDA				
Airlift Capability <sup>1</sup>	120	120	100	140
Cargo Forecast <sup>2</sup>	<u>441</u>	<u>393</u>	<u>420</u>	<u>477</u>
Surplus (Shortage)	(321)	(273)	(320)	(337)
CHS - C/S				
Airlift Capability <sup>3</sup>	820	780	1040	1220
Cargo Forecast <sup>2</sup>	<u>1947</u>	<u>1785</u>	<u>1878</u>	<u>1791</u>
Surplus (Shortage)	(1127)	(1005)	(838)	(571)
CHS - UK				
Airlift Capability <sup>1</sup>	1080	1120	1100	1300
Cargo Forecast <sup>2</sup>	<u>1953</u>	<u>2250</u>	<u>2406</u>	<u>2283</u>
Surplus (Shortage)	(873)	(1130)	(1306)	(983)
COF - AFR				
Airlift Capability <sup>3</sup>	480	440	510	540
Cargo Forecast <sup>2</sup>	<u>351</u>	<u>363</u>	<u>366</u>	<u>378</u>
Surplus (Shortage)	129	77	144	162

1. From Appendix G.
2. From Appendix I.
3. Airlift capability is computed by adding C-5 and C-141 capability from Appendix G.

TABLE 4.22

FY 87 Airlift Capability Surplus (Shortage) in Tons (Continued)  
Atlantic Region (21 AF)

MAI	QTR 1	QTR 2	QTR 3	QTR 4
NGU - AFR				
Airlift Capability <sup>1</sup>	260	280	260	160
Cargo Forecast <sup>2</sup>	<u>45</u>	<u>30</u>	<u>24</u>	<u>27</u>
Surplus (Shortage)	215	250	236	133
NGU - CARIB				
Airlift Capability <sup>1</sup>	600	580	580	660
Cargo Forecast <sup>2</sup>	<u>1179</u>	<u>1302</u>	<u>1245</u>	<u>1197</u>
Surplus (Shortage)	(579)	(722)	(665)	(537)
NGU - MED				
Airlift Capability <sup>3</sup>	1940	1900	2220	2000
Cargo Forecast <sup>2</sup>	<u>1968</u>	<u>1785</u>	<u>1914</u>	<u>1932</u>
Surplus (Shortage)	(28)	115	306	68
NGU - M/E				
Airlift Capability <sup>1</sup>	100	120	80	140
Cargo Forecast <sup>2</sup>	<u>858</u>	<u>705</u>	<u>717</u>	<u>807</u>
Surplus (Shortage)	(758)	(585)	(637)	(667)
NGU - N/C				
Airlift Capability <sup>1</sup>	500	460	640	540
Cargo Forecast <sup>2</sup>	<u>474</u>	<u>477</u>	<u>555</u>	<u>516</u>
Surplus (Shortage)	26	(17)	85	24

1. From Appendix G.
2. From Appendix I.
3. Airlift capability is computed by adding C-5 and C-141 capability from Appendix G.

contracts. Using the model as a tool, the surplus or shortage of airlift capability can be calculated for each MAI, adjustments can be made, and then commercial airlift can be bought with an idea of knowing not only the amount of the shortage, but where the shortage exists. Now that the model has been applied and the usefulness demonstrated, a computer program for the model can be developed for routine use at HQ MAC/TRKC. The next section will discuss that program.

#### Computer Program for the Model

Appendix J presents the computer program of the model. Written in TURBO BASIC programming language, it is designed to ask for specific information (total channel hours and cargo forecasts) then apply the formulas presented in Chapter Three to arrive at airlift capability for each MAI. Once this is determined, the program then matches airlift capability against cargo forecasts for each MAI to determine either a surplus or deficit of capability. The program also provides the option of printing the associated surplus or deficit for each MAI in the 21 AF and 22 AF.

The program allows the user to change the MAI portions of Tables 4.3 and 4.4 as a means of keeping the model current. Since errors are common while making inputs to the program, a statement was added for each quarter that requires all MAI portions to sum to one. If the portions do not sum to one, the user is returned to the first input statement associated with the quarter so that the necessary changes can be accomplished. This process will continue until the MAI portions for a quarter meet the condition described above.

The program is written so that airlift capability for the 22 AF is calculated first. This is necessary because Travis (SUU) supports the 21

AF MAI TIK - GER (which stops at DOV), and this capability is added to the DOV - GER MAI in order to determine a more accurate surplus or deficit for DOV - GER.

This chapter has executed the methodology in Chapter Three and presented the findings and analysis associated with comparing the present methodology with the proposed model. The accuracy of both techniques was determined and the proposed model was applied to FY 87 data. Finally, a computer program of the model was developed to allow for routine use of the model by HQ MAC/TRKC personnel. The next chapter will present the conclusions of this thesis.

## V. Conclusions

The first section of this chapter will review the investigative questions and the practical implications of the answers to these questions. The second section will discuss the need for additional research and knowledge of the global airlift system so that, over the long run, scarce resources will be allocated in an efficient and effective manner.

### Review of Investigative Questions

Recall in Chapter One that answers to the following investigative questions were necessary to accomplish the purpose of this thesis:

1. In the context of purchasing commercial airlift, how does MAC currently determine airlift capability for a given fiscal year and is this determination of capability accurate?
2. Does historical data provide a basis for determining an alternative method of calculating airlift capability and, if so, can a computer model be formulated to generate MAC airlift capability?
3. If an alternative method is available, is it more accurate than the present method of calculating airlift capability?

Chapters Two through Four partially answered investigative question one with the first part of the question addressed in Chapter Two. Chapter Three discussed determining the accuracy of the present methodology, while Chapter Four established the accuracy of that technique. It was found that the present methodology was not very accurate at determining airlift capability for the Pacific Region (22 AF), but was very accurate with the Atlantic Region (21 AF). This suggested the possibility of using different months for each region as a monthly average for calculating airlift capability. This procedure was relatively simple to execute and was kept somewhat current by using data from the previous year to calculate airlift

capability for an upcoming fiscal year. In determining airlift capability for FY 87, data from FY 86 was used.

If the present methodology continues in use, care must be taken in choosing a month that will serve as the monthly average for calculating airlift capability. This is probably the most critical aspect of this methodology for if the wrong month is chosen, the accuracy of determining airlift capability is degraded, as well as the effectiveness of purchasing commercial airlift over the long run (one year). Long-term commercial airlift may not be applied where it is really needed, thus creating the need for additional, costly short-term commercial airlift to meet contingencies. It must also be pointed out that cancelling long-term commercial airlift contracts can be expensive as there is usually a penalty clause for withdrawal. With the present methodology, it is also difficult to pinpoint where the commercial airlift is required. Probably the best indicator is what happened in the previous fiscal year and then learning from the mistakes. This mode of operation is not very effective at pinpointing where future shortages of airlift capability will occur, especially when considering the impact on each of the 23 MAIs.

Chapters Two, Three, and Four answered the second investigative question. Chapter Two provided a description of the data necessary to construct a model that would translate flying hours into airlift capability. Chapter Three discussed the methodology for constructing the proposed model and then checking for its accuracy. Chapter Four executed the methodology, determined the accuracy of the model, and then applied the model to FY 87. A computer program was also developed in Chapter Four that answered the second part of investigative question two. Compared to the present methodology, the model is complex and requires more inputs.

The computer program is the buffer between the user and the model. Anyone with a basic operating knowledge of personal computers can operate the model, although it is intended only for use by HQ MAC/TRKC.

Since the model is based on FY 86 data, it will gradually lose its effectiveness unless some model refinements are made. The most important refinement is keeping the MAI portions of total channel inter-theater flying hours current. If the MAI portions are not current, then flying hours and eventually airlift capability will not be accurately allocated to each MAI. How often should the MAI portions be adjusted? The answer is difficult at best, and must be based on the judgement of HQ MAC/TRKC personnel. No refinement is necessary from FY 86 to FY 87 with the possible exception of the MAI TIK - GER supported by C-5 aircraft. The MAI portion dropped off from FY 86 to FY 87, but even this circumstance did not overly degrade the accuracy of the model when compared to the present methodology. Another refinement that could be made is to keep the percentage of intra-theater flying hours to total channel hours for a given region current. This is not as critical as the MAI portions and is not prone to change as much because of the stability of the global airlift system. Refinements, if necessary, should be made annually for the MAI portions to keep the model current and useful.

Chapters Three and Four answered investigative question three. Chapter Three discussed the methodology for determining model accuracy, and Chapter Four determined the accuracy of the model and compared it with the present methodology. It was found that, overall, the model was more accurate than the present methodology. The model was dramatically more accurate in the Pacific Region, but was slightly less accurate than the present methodology in the Atlantic Region. Since more channel flying

hours were allocated to the Pacific Region, the accuracy of the model in this region took on additional importance.

The model generates more information than the present methodology. The present methodology provides a monthly average of airlift capability that can be multiplied by three to obtain a quarterly average and by 12 to obtain an annual average. It does not indicate how airlift capability is distributed through the global airlift system. On the other hand, the model provides a breakdown of airlift capability for each of the 23 MAIs. It indicates not only airlift capability, but the potential need for commercial augmentation. The model attempts to integrate the channel cargo portion of the global airlift system by allocating airlift capability to every MAI in the system. That is why construction of the model proved to be difficult because every MAI was examined to ensure its portion of channel flying hours was accurate.

The model is intended to be used as a tool to aid HQ MAC/TRKC in determining how airlift capability is allocated over the global airlift system, and where the potential for commercial augmentation may exist. By varying the inputs to the model, or adjusting model parameters, the effects on the channel airlift system can be studied with the objective being more effective procurement of long-term commercial airlift in the future.

#### Additional Research

This thesis has concentrated on the allocation of airlift capability over the global airlift system in the context of purchasing commercial airlift. The other important aspect of this issue concerns the accuracy of user forecasts. The Army, Navy, Air Force, Marines, and the Defense Logistics Agency submit their cargo forecasts for an upcoming year so that

MAC can take appropriate action to move the cargo. The question that needs to be asked is "How accurate are the user forecasts?" Allocation of airlift capability, whether commercial or military, can only be as accurate as the user forecasts. Research that could answer this question would prove extremely valuable to MAC in allocating airlift capability. Perhaps by comparing actual cargo movement by each MAI or channel with submitted forecasts, a forecasting model could be developed for projecting cargo movement. The data necessary for this research could be found at HQ MAC and could easily be applied to some type of time series forecasting model.

Another aspect of the global airlift system that would lend itself well to research is the impact of the C-17 on the channel airlift system. With this aircraft becoming operational in the near future, research needs to be accomplished as to its effect on the global airlift system. There arises the question of how much additional airlift capability will be added to the airlift system and how will it be allocated over the system? Allocation of airlift capability will certainly change, and this increase in capability will certainly have an effect on the process of purchasing commercial airlift. It will also be interesting to note the effect of this aircraft on the current organic fleet. Will the roles for these aircraft in the global airlift system change or remain static? The model developed in this thesis would prove useful in integrating C-17 airlift capability with the current organic fleet.

The MAC global airlift system has evolved to a point where more cargo is being moved with what seems to be less organic capability. With the resources of the global airlift system becoming more and more scarce, the efficient allocation of these resources becomes crucial in supporting and

maintaining the mission of MAC. Because of this circumstance, the process of allocating airlift capability, as well as purchasing commercial airlift will play an increasingly important role in future operations.

Appendix A: Airlift Capability for August 1986

From personal and telephone interviews with Deanie Nichols, GS-12,  
HQ MAC/DOOMA, Scott AFB IL, October 1987 - April 1988.

C-141

63 MAW (22 AF)

<u>Mission</u>	<u>Channel</u>	<u>Missions</u>	<u>Tons</u> <sup>1</sup>	<u>Capability</u>
0807	Norton - Kadena	30	x 18	= 540
0841	Travis - Hickam	8	x 18	= 144
0851	Travis - Clark	4	x 18	= 72
08E1	Travis - Alice Springs	5	x 18	= 90
Y8K3	Travis - Osan	5	x 18	= 90
Y841	Travis - Wake Island	2	x 18	= 36
Y841	Travis - Wake Island	2	x 18	= 36
0897	Travis - Eielson	3	x 18	= 54
0897	Travis - Elmendorf	3	x 18	= 54
Total Capability in Tons				1116

62 MAW

0641	Travis - Hickam	2	x 18	= 36
0691P	McChord - Adak Island	4	x 18	= 72
0691P	McChord - Adak Island	4	x 18	= 72
0695	McChord - Eielson	4	x 18	= 72
0697	McChord - Elmendorf	5	x 18	= 90
06E3	Norton - Learmonth	5	x 18	= 90
06K3	McChord - Osan	4	x 18	= 72
0677	McChord - Kadena	1	x 18	= 18
0687	McChord - Yokota	4	x 18	= 72
0653	Travis - Diego Garcia	4	x 18	= 72
687P	McChord - Diego Garcia	5	x 18	= 90
Total Capability in Tons				756

1. In order to compare this methodology with the proposed model, the capability for an individual sortie was controlled at 18 tons.

## C-141

60 MAW (22 AF)

<u>Mission</u>	<u>Channel</u>	<u>Missions</u>		<u>Tons</u> <sup>1</sup>	<u>Capability</u>
0541	Travis - Hickam	6	x	18	= 108
0555	Tinker - Kadena	4	x	18	= 72
0577	Tinker - Kadena	4	x	18	= 72
Y5C1	Travis - Cubi Point	4	x	18	= 72
05K5	Travis - Osan	4	x	18	= 72
4531	Travis - Midway	4	x	18	= 72
0551	Travis - Clark	5	x	18	= 90
05C1	Travis - Cubi Point	2	x	18	= 36
0551B	Travis - Clark	2	x	18	= 36
05C1	Travis - Diego Garcia	4	x	18	= 72
05C1B	Travis - Diego Garcia	5	x	18	= 90
Total Capability in Tons					<u>792</u>

## C-5

60 MAW

0341	Travis - Hickam	4	x	45	= 180
0351	Travis - Clark	4	x	45	= 180
0353	Travis - Clark	2	x	45	= 90
0371	Travis - Kadena	4	x	45	= 180
03K3	Travis - Osan	8	x	45	= 360
03R5	Travis - Rhein Main	9	x	45	= 405
Total Capability in Tons					<u>1395</u>

- In order to compare this methodology with the proposed model, the capability for an individual sortie was controlled at 18 tons (C-141) and 45 tons (C-5).

437 MAW (21 AF)

<u>Mission</u>	<u>Channel</u>	<u>Missions</u>		<u>Tons<sup>1</sup></u>	<u>Capability</u>
0465	Charleston - Kinshasa	1	x	20	= 20
0465B	Charleston - Kinshasa	1	x	20	= 20
0473	Norfolk - Guantanamo	5	x	20	= 100
0475	Norfolk - Guantanamo	4	x	20	= 80
04M1	Charleston - Mildenhall	13	x	20	= 260
04M3	Charleston - Mildenhall	4	x	20	= 80
04P1	Charleston - Prestwick	2	x	20	= 40
04P3	Norfolk - Diego Garcia	4	x	20	= 80
0459	Norfolk - Sigonella	16	x	20	= 320
0477	Charleston - Howard	8	x	20	= 160
0479	Charleston - Howard	2	x	20	= 40
0483	Patrick - Ascension	8	x	20	= 160
0489	Charleston - Howard	1	x	20	= 20
0491	Charleston - Howard	1	x	20	= 20
0493	Charleston - Howard	1	x	20	= 20
0497	Charleston - Howard	1	x	20	= 20
04J1	Dover - King 'Abdullah	4	x	20	= 80
04Q1	Dover - Cairo	4	x	20	= 80
0453	Norfolk - Thumrait	1	x	20	= 20
04V7	Norfolk - Rota	4	x	20	= 80
Total Capability in Tons					<u>1700</u>

438 MAW

0707	McGuire - FSS	30	x	20	= 600
0759	McGuire - MED	4	x	20	= 80
0769	McGuire - Lajes	4	x	20	= 80
0773	McGuire - Roosevelt 'Roads	2	x	20	= 40
0787	Patrick - Ascension	1	x	20	= 20
0793	Charleston - Howard	1	x	20	= 20
07A1	McGuire - Athens	4	x	20	= 80
ALA	McGuire - MED	10	x	20	= 200
07H5	McGuire - Thule	4	x	20	= 80
07H7	McGuire - Thule	12	x	20	= 240
07H5B	McGuire - Thule	4	x	20	= 80
07K5	Norfolk - Keflavik	8	x	20	= 160
07T1	McGuire - Torrejon	4	x	20	= 80
Total Capability in Tons					<u>1760</u>

1. In order to compare this methodology with the proposed model, the capability for an individual sortie was controlled at 20 tons.

Appendix B: FY 86 Scheduled Channel Hours

22 AF

From the MAC Monthly Cargo Schedules for Fiscal Year 1986.

C -141

MAI	QTR 1	QTR 2	QTR 3	QTR 4
TCM				
ALA	859.92	875.78	871.15	1027.26
NPAC	1924.65	2096.67	2208.31	2298.92
DOV-MED <sup>1</sup>	0	0	39.42	116.17
DOV-M/E <sup>1</sup>	0	0	44.92	219.99
WRI-GER <sup>1</sup>	0	0	33.83	33.83
SBD				
CPAC	626.21	624.88	652.56	657.53
SPAC	626.21	624.88	652.56	657.53
DOV-MED <sup>2</sup>	0	0	39.42	75.83
DOV-M/E <sup>2</sup>	0	0	44.00	175.50
WRI-GER <sup>2</sup>	0	0	67.66	33.83
SUU				
CPAC	11007.63	10043.43	11668.31	10649.14
NPAC	0	0	116.83	329.45
DOV-MED <sup>3</sup>	0	0	75.34	76.33
DOV-M/E <sup>3</sup>	0	0	88.84	174.92
WRI-GER <sup>3</sup>	0	0	33.83	67.66
TOTAL HOURS	15044.62	14265.64	16636.98	16593.89

C-5

SUU				
CPAC	1075.71	1218.75	1613.56	1751.84
NPAC	343.02	278.13	251.43	396.02
TIK-GER <sup>4</sup>	1507.57	1147.50	623.41	799.62
TOTAL HOURS	2926.30	2644.38	2488.40	2947.48

1. McChord (TCM) serves this MAI in the third and fourth quarters.
2. Norton (SBD) serves this MAI in the third and fourth quarters.
3. Travis (SUU) serves this MAI in the third and fourth quarters.
4. Travis (SUU) serves this MAI.

21 AF

C-141

MAI	QTR 1	QTR 2	QTR 3	QTR 4
DOV				
GER	914.28	743.62	624.58	625.72
MED	1494.32	1036.10	691.46	139.60
M/E	196.11	196.39	196.08	196.10
WRI				
LGS	1267.23	1301.32	1315.13	1343.14
MED	2212.81	2836.55	2981.93	2709.35
N/C	1054.16	996.91	1061.72	1127.35
CHS				
AFR	259.81	229.02	224.25	225.48
BDA	76.32	76.32	76.16	89.08
C/S	645.08	650.39	717.67	703.13
UK	1082.25	1166.46	1179.94	1206.96
COF				
AFR	673.34	661.51	648.26	686.59
NGU				
AFR	686.15	765.78	741.40	413.67
CARIB	341.16	342.60	342.28	338.73
MED	2338.01	2387.71	2624.53	2093.19
M/E	213.02	231.86	141.68	229.61
M/C	340.08	331.25	487.78	342.42
TOTAL HOURS	<u>13794.13</u>	<u>13953.79</u>	<u>14054.85</u>	<u>12470.12</u>

C-5

DOV				
GER	882.14	744.06	1095.40	1230.32
MED	706.01	679.41	775.38	1147.26
M/E	1217.06	1085.11	737.26	418.21
NGU				
MED	426.79	426.79	482.05	438.25
CHS				
C/S	0	0	61.66	129.77
COF				
AFR	0	0	27.00	0
TOTAL HOURS	<u>3232.00</u>	<u>2935.37</u>	<u>3178.75</u>	<u>3363.81</u>

Intra-Theater Channel Hours <sup>1</sup>

C-141

	<u>22 AF</u>	<u>21 AF</u>
October	437.75	92.35
November	403.50	80.67
December	<u>403.50</u>	<u>80.67</u>
Quarter 1	1244.75	253.69
January	358.70	80.68
February	337.22	80.68
March	<u>350.08</u>	<u>89.18</u>
Quarter 2	1046.00	250.54
April	363.39	58.35
May	366.74	70.68
June	<u>366.99</u>	<u>86.68</u>
Quarter 3	1097.12	215.71
July	380.07	90.35
August	384.24	78.68
September	<u>367.85</u>	<u>86.68</u>
Quarter 4	1132.16	255.71

1. There are no intra-theater sorties for the C-5.

Appendix C: FY 86 MAI Portions of Channel Hours

From the MAC Monthly Cargo Schedules for Fiscal Year 1986.

S = Number of sorties flown against an MAI for a FY 86 quarter

Q = MAI flying hours for a FY 86 quarter

L = Actual airlift capability in cargo tons

A = Average sortie length in hours for an MAI in a FY 86 quarter

T = Total scheduled channel inter-theater hours for a FY 86 quarter

P = Portion of T dedicated to the MAI

Pacific Region (C-141)

TCM - ALA

October - December 1985 (1st Quarter)

Cargo Route	Num of Mns	Cargo Pct ALA	Msns for ALA	Msn Flight Time	Fly Hours ALA	Actual Capability Tons
P691P OCT	5	100	5	18.75	93.75	90
P694A	5	100	5	21.58	107.90	90
P695A	4	100	4	8.92	35.68	72
Y897A	2	100	2	13.25	26.50	36
Y899A	2	100	2	19.42	38.84	36
P691P NOV	4	100	4	18.33	73.32	72
P694A	4	100	4	20.83	83.32	72
P695A	4	100	4	8.92	35.68	72
Y895A	2	100	2	13.58	27.16	36
Y899A	2	100	2	19.08	38.16	36
P691A DEC	3	100	3	18.83	56.49	54
P692A	2	100	2	12.92	25.84	36
P694A	4	100	4	21.42	85.68	72
P695A	5	100	5	8.92	44.60	90
P697A	2	100	2	7.08	14.16	36
Y894A	2	100	2	16.92	33.84	36
Y899A	2	100	2	19.50	39.00	36
			S = 54		Q = 859.92	L = 972

A = 859.92 / 54 = 15.92

T = 15045 for the first quarter (Appendix B)

P = 859.92 / 15045 = .057

January - March 1986 (2nd Quarter)

P691P JAN	5	100	4	18.75	75.00	72
P694A	5	100	5	21.83	109.15	90
P695A	4	100	4	9.00	36.00	72
Y897A	2	100	2	13.50	27.00	36
Y899A	3	100	3	19.67	59.01	54
P691P FEB	4	100	4	18.92	75.68	72
P694A	4	100	4	22.00	88.00	72
P695A	4	100	4	9.42	37.68	72
Y895A	2	100	2	14.58	29.16	36
Y899A	2	100	2	20.33	40.66	36
P691P MAR	4	100	4	19.00	76.00	72
P694A	4	100	4	22.50	90.00	72
P695A	5	100	5	9.17	45.85	90
Y894A	3	100	3	15.75	47.25	54
Y899A	2	100	2	19.67	39.34	36
			<u>S = 52</u>		<u>Q = 875.78</u>	<u>L = 936</u>

$$A = 875.78 / 52 = 16.84$$

$$T = 14266 \text{ for the second quarter (Appendix B)}$$

$$P = 875.78 / 14266 = .061$$

April - June 1986 (3rd Quarter)

P691P APR	5	100	5	19.08	95.40	90
P694A	4	100	4	22.00	88.00	72
P695A	4	100	4	8.92	35.68	72
Y897A	2	100	2	13.33	26.66	36
Y899A	2	100	2	19.33	38.66	36
P691A MAY	4	100	4	18.75	75.00	72
P694A	5	100	5	21.17	105.85	90
P695A	4	100	4	8.83	35.32	72
Y895A	2	100	2	14.08	28.16	36
Y899A	2	100	2	18.92	37.84	36
P691A JUN	4	100	4	18.67	74.68	72
P694A	4	100	4	21.33	85.32	72
P695A	5	100	5	8.92	44.60	90
P697A	4	100	4	7.08	28.32	72
Y894A	2	100	2	16.25	32.50	36
Y899A	2	100	2	19.58	39.16	36
			<u>S = 55</u>		<u>Q = 871.15</u>	<u>L = 990</u>

$$A = 871.15 / 55 = 15.84$$

$$T = 16637 \text{ for the third quarter (Appendix B)}$$

$$P = 871.15 / 16637 = .052$$

July - September 1986 (4th Quarter)

P897A	JUL	2	100	2	19.08	95.40	90
P597A		3	100	3	9.92	29.76	54
P691P		5	100	5	19.25	96.25	90
P694A		5	100	5	26.08	130.40	90
P695A		4	100	4	8.83	35.32	72
P697A		4	100	4	7.08	28.32	72
P697A		2	100	2	7.08	14.16	36
Y897A		2	100	2	13.25	26.50	36
Y899A		2	100	2	19.50	39.00	36
P691A	AUG	4	100	4	18.50	74.00	72
P694A		4	100	4	21.00	84.00	72
P695A		4	100	4	8.83	35.32	72
Y895A		3	100	3	14.33	42.99	54
Y899A		3	100	3	19.42	58.26	54
P691P	SEP	5	100	5	18.83	94.15	90
P694P		4	100	4	25.42	101.68	72
P695A		5	100	5	8.83	44.15	90
Y894A		2	100	2	15.67	31.34	36
Y899A		2	100	2	19.33	38.66	36
				<u>2</u>		<u>38.66</u>	<u>36</u>
				S =	<u>65</u>	Q = <u>1027.26</u>	L = <u>1170</u>

$$A = 1027.26 / 65 = 15.80$$

$$T = 16594 \text{ for the fourth quarter (Appendix B)}$$

$$P = 1027.26 / 16594 = .062$$

TCM - NPAC  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct NPAC	Msns for NPAC	Msn Flight Time	Fly Hours NPAC	Actual Capability Tons
P5K5A OCT	5	100	5	28.83	144.15	90
R687A	4	100	4	12.25*	98.00	72
R8K3P	4	100	4	31.33	125.32	72
Y687A	5	100	5	61.33	306.65	90
P5K5P NOV	4	100	4	28.58	114.32	72
R687A	4	100	4	12.67*	101.36	72
R8K3P	4	100	4	30.67	122.68	72
Y687A	4	100	4	62.08	248.32	72
P5K5P DEC	5	100	5	28.67	143.35	90
R687A	5	100	5	12.17*	121.65	90
R8K3P	5	100	5	31.17	155.85	90
Y687B	4	100	4	60.75	243.00	72
			S = 53		Q = 1924.65	L = 954

A = 1924.65 / 53 = 36.31  
T = 15045 for the first quarter (Appendix B)  
P = 1924.65 / 15045 = .128

January - March 1986 (2nd Quarter)

P5K5P JAN	4	100	4	28.42	113.68	72
P687A	5	100	5	60.75	303.75	90
P688A	3	100	3	61.92	185.76	54
R687A	4	100	4	12.00*	96.00	72
R8K3P	4	100	4	30.92	123.68	72
P5K5P FEB	4	100	4	28.92	115.68	72
P687A	4	100	4	60.67	242.68	72
P6K1A	4	100	4	25.75	103.00	72
R687A	4	100	4	12.00*	96.00	72
R8K3P	4	100	4	31.83	127.32	72
P5K5P MAR	4	100	4	29.00	116.00	72
P687A	1	100	1	61.92	61.92	18
P6K1A	5	100	5	25.75	128.75	90
R687A	5	100	5	12.58*	125.80	90
R8K3P	5	100	5	31.33	156.65	90
			S = 60		Q = 2096.67	L = 1080

A = 2096.67 / 60 = 34.94  
T = 14266 for the second quarter (Appendix B)  
P = 2096.67 / 14266 = .147

\* This cargo route is one way, so the flight time is doubled to account for eventual return to CONUS.

April - June 1986 (3rd Quarter)

P5K3P APR	1	100	1	31.50	31.50	18
P5K5P	2	100	2	29.50	59.00	36
P687A	4	100	4	59.83	239.32	72
P6KOP	1	100	1	25.42	25.42	18
P6K1A	4	100	4	24.92	99.68	72
P6K2A	1	100	1	21.25	21.25	18
R687A	4	100	4	12.08*	96.64	72
R8K3P	4	100	4	31.25	125.00	72
P5K4P MAY	1	100	1	25.67	25.67	18
P687A	4	100	4	60.00	240.00	72
P6K0A	1	100	1	25.42	25.42	18
P6K1A	3	100	3	24.92	74.76	54
P6K2A	1	100	1	28.92	28.92	18
R687A	3	100	3	11.50*	69.00	54
R688T	1	100	1	13.58*	27.16	18
R8K3A	3	100	3	31.92	95.76	54
R8K4P	1	100	1	33.67	33.67	18
P5K5P JUN	5	100	5	28.67	143.35	90
P687A	2	100	2	22.92	45.84	36
P6K1A	6	100	6	25.83	154.98	108
R677T	1	100	1	13.58*	27.16	18
R687A	4	100	4	11.58*	92.64	72
R688A	1	100	1	13.58*	27.16	18
R877T	1	100	1	31.75	31.75	18
R8K3A	4	100	4	31.92	127.68	72
Y686P	3	100	3	59.58	178.74	54
Y687Q	1	100	1	60.83	60.83	18
			S = $\frac{1}{67}$		Q = $\frac{2208.30}{67}$	L = $\frac{1206}{67}$

$$A = 2208.30 / 67 = 32.96$$

$$T = 16637 \text{ for the third quarter (Appendix B)}$$

$$P = 2208.30 / 16637 = .133$$

\* This cargo route is one way, so the flight time is doubled to account for eventual return to CONUS.

July - September 1986 (4th Quarter)

P686A	JUL	1	100	1	21.50	21.50	18
P6K1A		4	100	4	25.33	101.32	72
R677A		1	100	1	13.67*	27.34	18
R687A		3	100	3	11.42*	68.52	54
R877A		1	100	1	31.25	31.25	18
R8K3P		3	100	3	31.17	93.51	54
Y653C		4	100	4	68.50	274.00	72
Y654C		1	100	1	69.33	69.33	18
Y688P		3	100	3	59.00	177.00	54
Y689P		1	100	1	58.58	58.58	18
P5K5P	AUG	3	100	3	28.50	85.50	54
P687A		3	100	3	22.42	67.26	54
P6KOP		1	100	1	25.42	25.42	18
P6K1A		4	100	4	25.50	102.00	72
R677A		1	100	1	13.67*	27.34	18
R687A		4	100	4	11.67*	93.36	72
R877P		1	100	1	31.25	31.25	18
R8K3P		4	100	4	31.17	124.68	72
Y686P		4	100	4	59.42	237.68	72
Y687P		1	100	1	58.92	58.92	18
P6K1A	SEP	2	100	2	26.08	52.16	36
R677A		3	100	3	13.83*	82.98	54
R687A		1	100	1	12.50*	25.00	18
R877P		3	100	3	31.75	95.25	54
R8K3P		1	100	1	30.92	30.92	18
Y686P		2	100	2	59.50	119.00	36
Y687P		2	100	2	58.92	117.84	36
				S =	62	Q = 2298.92	L = 1116

$$A = 2298.92 / 62 = 37.08$$

$$T = 16594 \text{ for the fourth quarter (Appendix B)}$$

$$P = 2298.92 / 16594 = .138$$

\* This cargo route is one way, so the flight time is doubled to account for eventual return to CONUS.

DOV - MED (21 AF) from TCM (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
P677A MAY	1	100	$S = \frac{1}{1}$	39.42	$Q = \frac{39.42}{39.42}$	$L = \frac{18}{18}$

A = 39.42 / 1 = 39.42  
 T = 16637 for the third quarter (Appendix B)  
 P = 39.42 / 16637 = .002

July - September (4th Quarter)

S6T1A AUG	2	100	2	39.00	78.00	36
S6T1A	1	100	$S = \frac{1}{3}$	38.17	$Q = \frac{38.17}{116.17}$	$L = \frac{18}{54}$

A = 116.17 / 3 = 38.72  
 T = 16594 for the fourth quarter (Appendix B)  
 P = 116.17 / 16594 = .007

DOV - M/E (21 AF) from TCM (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct M/E	Msns for M/E	Msn Flight Time	Fly Hours M/E	Actual Capability Tons
S6W3A JUN	1	100	$\frac{1}{1}$	44.92	$\frac{44.92}{44.92}$	$\frac{18}{18}$

A = 44.92 / 1 = 44.92  
 T = 16637 for the third quarter (Appendix B)  
 P = 44.92 / 16637 = .003

July - September 1986 (4th Quarter)

S6W3A JUL	2	100	2	44.33	88.66	36
S6W3A AUG	1	100	1	44.33	44.33	18
S6W3A SEP	2	100	$\frac{2}{5}$	43.50	$\frac{87.00}{219.99}$	$\frac{36}{90}$

A = 219.99 / 5 = 44.00  
 T = 16594 for the fourth quarter (Appendix B)  
 P = 219.99 / 16594 = .013

WRI - MED (21 AF) from TCM (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
S6V3A	1	100	$S = \frac{1}{1}$	33.83	$Q = \frac{33.83}{33.83}$	$L = \frac{18}{18}$

A = 33.83 / 1 = 33.83  
 T = 16637 for the third quarter (Appendix B)  
 P = 33.83 / 16637 = .002

July - September (4th Quarter)

S6V3A	1	100	$S = \frac{1}{1}$	33.83	$Q = \frac{33.83}{33.83}$	$L = \frac{18}{18}$
-------	---	-----	-------------------	-------	---------------------------	---------------------

A = 33.83 / 1 = 33.83  
 T = 16594 for the fourth quarter (Appendix B)  
 P = 33.83 / 16594 = .002

SBD - CPAC  
October - December 1986 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct CPAC	Msns for CPAC	Msn Flight Time	Fly Hours CPAC	Actual Capability Tons
P6E3A OCT	2	50 SPAC	1	53.67	53.67	18
P6E4A	2	50 SPAC	1	51.42	51.42	18
P8E1A	4	50 SPAC	2	43.25	86.50	36
P6E3A NOV	5	50 SPAC	2.5	53.33	133.33	45
P8E1A	5	50 SPAC	2.5	43.25	108.13	45
P6E3A DEC	4	50 SPAC	2	53.58	107.16	36
P8E1A	4	50 SPAC	2	43.00	86.00	36
			S = 13		Q = 626.21	L = 234

A = 626.21 / 13 = 48.17  
T = 15045 for the first quarter (Appendix B)  
P = 626.21 / 15045 = .042

January - March 1986 (2nd Quarter)

P6E3A JAN	4	50 SPAC	2	53.17	106.34	36
P8E1A	5	50 SPAC	2.5	43.17	107.93	45
P6E3A FEB	4	50 SPAC	2	53.25	106.50	36
P8E1A	4	50 SPAC	2	42.67	85.34	36
P6E3A MAR	5	50 SPAC	2.5	53.17	132.93	45
P8E1A	4	50 SPAC	2	42.92	85.84	36
			S = 13		Q = 624.88	L = 234

A = 624.88 / 13 = 48.07  
T = 14266 for the second quarter (Appendix B)  
P = 624.88 / 14266 = .044

April - June 1986 (3rd Quarter)

P6E3A APR	4	50 SPAC	2	53.83	107.66	36
P8E1A	4	50 SPAC	2	43.50	87.00	36
P6E3A MAY	5	50 SPAC	2.5	58.50	146.25	45
P8E1A	5	50 SPAC	2.5	43.42	108.55	45
P6E3A JUN	4	50 SPAC	2	58.50	117.00	36
P8E1A	4	50 SPAC	2	43.08	86.10	36
			S = 13		Q = 652.56	L = 234

$$A = 652.56 / 13 = 50.20$$

$$T = 16637 \text{ for the third quarter (Appendix B)}$$

$$P = 652.56 / 16637 = .039$$

July - September 1986 (4th Quarter)

P6E3A JUL	4	50 SPAC	2	58.50	117.00	36
P8E1A	4	50 SPAC	2	43.50	87.00	36
P6E3A AUG	5	50 SPAC	2.5	57.83	144.58	45
P8E1A	5	50 SPAC	2.5	42.58	106.45	45
P6E3A SEP	4	50 SPAC	2	58.50	117.00	36
P8E1A	4	50 SPAC	2	42.75	85.50	36
			S = 13		Q = 657.53	L = 234

$$A = 657.53 / 13 = 50.58$$

$$T = 16594 \text{ for the fourth quarter (Appendix B)}$$

$$P = 657.53 / 16594 = .040$$

SBD - SPAC  
October - December 1985

Cargo Route	Num of Msns	Cargo Pct SPAC	Msns for SPAC	Msn Flight Time	Fly Hours SPAC	Actual Capability Tons
P6E3A OCT	2	50 CPAC	1	53.67	53.67	18
P6E4A	2	50 CPAC	1	51.42	51.42	18
P8E1A	4	50 CPAC	2	43.25	86.50	36
P6E3A NOV	5	50 CPAC	2.5	53.33	133.33	45
P8E1A	5	50 CPAC	2.5	43.25	108.13	45
P6E3A	4	50 CPAC	2	53.58	107.16	36
P8E1A	4	50 CPAC	2	43.00	86.00	36
			S = 13		Q = 626.21	L = 234

A = 626.21 / 13 = 48.17  
T = 15045 for the first quarter (Appendix B)  
P = 626.21 / 15045 = .042

January - March 1986

P6E3A JAN	4	50 CPAC	2	53.17	106.34	36
P8E1A	5	50 CPAC	2.5	43.17	107.93	45
P6E3A FEB	4	50 CPAC	2	53.25	106.50	36
P8E1A	4	50 CPAC	2	42.67	85.34	36
P6E3A MAR	5	50 CPAC	2.5	53.17	132.93	45
P8E1A	4	50 CPAC	2	42.92	85.84	36
			S = 13		Q = 624.88	L = 234

A = 624.88 / 13 = 48.07  
T = 14266 for the second quarter (Appendix B)  
P = 624.88 / 14266 = .044

April - June 1986 (3rd Quarter)

P6E3A APR	4	50 CPAC	2	53.83	107.66	36
P8E1A	4	50 CPAC	2	43.50	87.00	36
P6E3A MAY	5	50 CPAC	2.5	58.50	146.25	45
P8E1A	5	50 CPAC	2.5	43.42	108.55	45
P6E3A JUN	4	50 CPAC	2	58.50	117.00	36
P8E1A	4	50 CPAC	2	43.08	86.10	36
			$S = \underline{13}$		$Q = \underline{652.56}$	$L = \underline{234}$

$$A = 652.56 / 13 = 50.20$$

$$T = 16637 \text{ for the third quarter (Appendix B)}$$

$$P = 652.56 / 16637 = .039$$

July - September 1986 (4th Quarter )

P6E3A JUL	4	50 CPAC	2	58.50	117.00	36
P8E1A	4	50 CPAC	2	43.50	87.00	36
P6E3A AUG	5	50 CPAC	2.5	57.83	144.58	45
P8E1A	5	50 CPAC	2.5	42.58	106.45	45
P6E3A SEP	4	50 CPAC	2	58.50	117.00	36
P8E1A	4	50 CPAC	2	42.75	85.50	36
			$S = \underline{13}$		$Q = \underline{657.53}$	$L = \underline{234}$

$$A = 657.53 / 13 = 50.58$$

$$T = 16594 \text{ for the fourth quarter (Appendix B)}$$

$$P = 657.53 / 16594 = .040$$

DOV - MED (21 AF) from SBD (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
P8T1A MAY	1	100	$S = \frac{1}{1}$	39.42	$Q = \frac{39.42}{39.42}$	$L = \frac{18}{18}$

$A = 39.42 / 1 = 39.42$   
 $T = 16637$  for the third quarter (Appendix B)  
 $P = 39.42 / 16637 = .003$

July - September 1986 (4th Quarter)

S8T1A AUG	1	100	1	38.33	38.33	18
S8T1A	1	100	$S = \frac{1}{2}$	37.50	$Q = \frac{37.50}{75.83}$	$L = \frac{18}{36}$

$A = 75.83 / 2 = 37.92$   
 $T = 16594$  for the fourth quarter (Appendix B)  
 $P = 75.83 / 16594 = .004$

DOV - M/E (21 AF) from SBD (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct M/E	Msns for M/E	Msn Flight Time	Fly Hours M/E	Actual Capability Tons
S8W3A JUN	1	100	$S = \frac{1}{1}$	44.00	$Q = \frac{44.00}{44.00}$	$L = \frac{18}{18}$

A = 44.00 / 1 = 44.00  
 T = 16637 for the third quarter (Appendix B)  
 P = 44.00 / 16637 = .003

July - September (4th Quarter)

S8W3A JUL	2	100	2	44.00	88.00	36
S8W3A AUG	1	100	1	44.00	44.00	18
S8W3A SEP	1	100	$S = \frac{1}{4}$	43.50	$Q = \frac{43.50}{175.50}$	$L = \frac{18}{72}$

A = 175.50 / 4 = 43.88  
 T = 16594 for the fourth quarter (Appendix B)  
 P = 175.50 / 16594 = .011

WRI - MED (21 AF) from SBD (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
S8V3A JUN	2	100	$S = \frac{2}{2}$	33.83	$Q = \frac{67.66}{67.66}$	$L = \frac{36}{36}$

A =  $67.66 / 2 = 33.83$   
 T = 16637 for the third quarter (Appendix B)  
 P =  $67.66 / 16637 = .004$

July - September 1986 (4th Quarter)

S8V3A JUL	1	100	$S = \frac{1}{1}$	33.83	$Q = \frac{33.83}{33.83}$	$L = \frac{18}{18}$
-----------	---	-----	-------------------	-------	---------------------------	---------------------

A =  $33.83 / 1 = 33.83$   
 T = 16594 for the fourth quarter (Appendix B)  
 P =  $33.83 / 16594 = .002$

SUU - CPAC  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct CPAC	Msns for CPAC	Msn Flight Time	Fly Hours CPAC	Actual Capability Tons
P555A OCT	4	100	4	41.50	166.00	72
P577A	5	100	5	38.83	194.15	90
Y531A	5	100	5	27.67	138.35	90
Y551A	4	100	4	35.00	140.00	72
Y552A	3	100	3	35.58	106.74	54
Y553A	2	100	2	35.00	70.00	36
Y502B	4	100	4	78.00	312.00	72
Y503A	4	100	4	66.58	266.32	72
Y651A	5	100	5	54.58	272.90	90
Y601B	5	100	5	67.08	335.40	90
Y807A	31	100	31	45.75	1418.25	558
Y841A	4	100	4	31.75	127.00	72
Y850A	3	100	3	69.58	208.74	54
Y851A	1	100	1	70.42	70.42	18
P555A NOV	4	100	4	40.67	162.68	72
P577A	4	100	4	38.25	153.00	72
Y531B	4	100	4	31.75	127.00	72
Y551A	4	100	4	35.00	140.00	72
Y552A	2	100	2	35.58	71.16	36
Y553A	2	100	2	35.00	70.00	36
Y502A	5	100	5	78.00	390.00	90
Y503A	4	100	4	66.08	264.32	72
Y651A	4	100	4	54.58	218.32	72
Y601A	4	100	4	67.08	268.32	72
Y807A	25	100	25	45.75	1143.75	450
Y808A	5	100	5	41.75	208.75	90
Y840A	2	100	2	41.75	83.50	36
Y841B	2	100	2	31.67	63.34	36
Y850A	4	100	4	69.58	278.32	72
Y851A	1	100	1	70.42	70.42	18

P555A	DEC	5	100	5	39.83	199.15	90
P579A		4	100	4	31.33	125.32	72
P5C1A		4	100	4	34.83	139.32	72
Y531B		5	100	5	31.75	158.75	90
Y552A		2	100	2	35.25	70.50	36
Y553A		2	100	2	34.67	69.34	36
Y555A		4	100	4	41.50	166.00	72
Y5COA		1	100	1	77.25	77.25	18
Y5C2A		3	100	3	77.67	233.01	54
Y5C3B		5	100	5	66.67	333.35	90
Y653A		4	100	4	70.25	281.00	72
Y654A		1	100	1	71.08	71.08	18
Y807A		26	100	26	45.75	1189.50	468
Y808A		4	100	4	41.58	166.32	72
Y840A		3	100	3	41.75	125.25	54
Y841A		2	100	2	31.67	63.34	36
				S =	<u>231</u>	Q = 11007.63	L = <u>4158</u>

$$A = 11007.63 / 231 = 47.65$$

$$T = 15045 \text{ for the first quarter (Appendix B)}$$

$$P = 11007.63 / 15045 = .731$$

January - March 1986 (2nd Quarter)

P555A	JAN	4	100	4	40.08	160.32	72
P579A		5	100	5	31.33	156.65	90
P501A		5	100	5	34.83	174.15	90
P502B		4	100	4	50.58	202.32	72
Y531B		4	100	4	31.75	127.00	72
Y551A		4	100	4	34.50	138.00	72
Y552A		2	100	2	35.25	70.50	36
Y553A		3	100	3	34.50	103.50	54
Y502A		4	100	4	77.67	310.68	72
Y653A		3	100	3	70.17	210.51	54
Y654A		1	100	1	71.00	71.00	18
Y807A		27	100	27	45.58	1230.66	486
Y808A		4	100	4	41.25	165.00	72
Y840A		2	100	2	41.75	83.50	36
Y841A		2	100	2	31.67	63.34	36
P555A	FEB	4	100	4	39.75	159.00	72
P577A		4	100	4	30.67	122.68	72
P501A		4	100	4	34.75	139.00	72
P502A		4	100	4	50.75	203.00	72
P851A		4	100	4	36.08	144.32	72
Y531B		4	100	4	31.75	127.00	72
Y551A		4	100	4	34.42	137.68	72
Y552A		2	100	2	34.92	69.84	36
Y553A		2	100	2	34.42	68.84	36
Y502A		4	100	4	77.33	309.32	72
Y653A		3	100	3	69.75	209.25	54
Y654A		1	100	1	70.58	70.58	18
Y806A		4	100	4	45.75	183.00	72
Y897A		20	100	20	45.75	915.00	360
Y808A		4	100	4	41.75	167.00	72
Y840A		2	100	2	41.75	83.50	36
Y841A		2	100	2	31.58	63.16	36

P555A MAR	4	100	4	40.92	163.68	72
P556A	1	100	1	40.67	40.67	18
P577A	4	100	4	30.67	122.68	72
P500A	3	100	3	33.67	101.01	54
P501B	1	100	1	34.83	34.83	18
P503A	1	100	1	49.75	49.75	18
P504A	3	100	3	49.75	149.25	54
P505V	1	100	1	50.83	50.83	18
P851A	1	100	1	36.08	36.08	18
P881A	4	100	4	35.42	141.68	72
Y531B	4	100	4	31.67	126.68	72
Y550A	4	100	4	34.75	139.00	72
Y551A	1	100	1	34.75	34.75	18
Y552F	2	100	2	38.75	77.50	76
Y553B	2	100	2	34.75	69.50	36
Y500B	4	100	4	83.00	332.00	72
Y502A	1	100	1	78.00	78.00	18
Y650B	2	100	2	70.00	140.00	36
Y653A	1	100	1	70.17	70.17	18
Y654C	1	100	1	70.92	70.92	18
Y803A	4	100	4	45.75	183.00	72
Y804A	17	100	17	44.75	777.75	306
Y805C	4	100	4	41.33	165.32	72
Y807B	1	100	1	45.75	45.75	18
Y807B	4	100	4	45.75	183.00	72
Y808A	1	100	1	41.75	41.75	18
Y840A	2	100	2	41.92	83.84	36
Y841A	3	100	3	31.58	94.74	54
			S =	<u>227</u>	Q = 10043.43	L = <u>4086</u>

$$A = 10043.43 / 227 = 44.24$$

$$T = 14266 \text{ for the second quarter (Appendix B)}$$

$$P = 10043.43 / 14266 = .704$$

April - June 1986 (3rd Quarter)

P541A	APR	4	100	4	11.08	44.32	72
P555A		4	100	4	41.25	165.00	72
P577A		4	100	4	38.75	155.00	72
P501A		4	100	4	34.83	139.32	72
P641A		4	100	4	14.08	56.32	72
P841A		5	100	5	12.83	64.15	90
P851A		4	100	4	36.42	145.68	72
Y531A		5	100	5	31.67	158.35	90
Y551A		4	100	4	34.67	138.68	72
Y552A		3	100	3	35.17	105.51	54
Y553A		2	100	2	34.67	69.34	36
Y5C1P		4	100	4	66.83	267.32	72
Y5C2B		4	100	4	84.00	336.00	72
Y653A		4	100	4	70.17	280.68	72
Y654A		1	100	1	71.00	71.00	18
Y806A		4	100	4	45.75	183.00	72
Y807A		23	100	23	45.75	1052.25	414
Y808A		3	100	3	41.33	123.99	54
Y840A		2	100	2	42.25	84.50	36
Y841A		2	100	2	31.83	63.66	36
Y852A		4	100	4	69.25	277.00	72
P555A	MAY	4	100	4	41.50	166.00	72
P577A		5	100	5	38.75	193.75	90
P501A		4	100	4	35.42	141.68	72
P502A		1	100	1	35.42	35.42	18
P688A		1	100	1	63.17	63.17	18
P851A		4	100	4	36.33	145.32	72
Y531A		4	100	4	31.67	126.68	72
Y551A		4	100	4	34.75	139.00	72
Y552A		2	100	2	35.42	70.84	36
Y553A		2	100	2	34.75	69.50	36
Y5COP		1	100	1	67.42	67.42	18
Y501A		3	100	3	66.83	200.49	54
Y502A		5	100	5	77.83	389.15	90
Y653A		3	100	3	70.17	210.51	54
Y654A		1	100	1	71.00	71.00	18
Y805A		1	100	1	41.50	41.50	18
Y806A		3	100	3	45.75	137.25	54
Y807A		24	100	24	45.75	1098.00	432
Y808A		3	100	3	41.50	124.50	54
Y840A		2	100	2	42.00	84.00	36
Y841A		2	100	2	31.83	63.66	36
Y852A		5	100	5	69.25	346.25	90

P541A JUN	4	100	4	11.00	44.00	72
P555A	5	100	5	42.00	210.00	90
P577A	4	100	4	39.17	156.68	72
P501A	2	100	2	34.92	69.84	36
P502A	1	100	1	35.25	35.25	18
P502A	1	100	1	35.25	35.25	18
P641A	3	100	3	13.33	39.99	54
P641A	1	100	1	13.33	13.33	18
P841A	5	100	5	12.67	63.35	90
P851A	5	100	5	36.50	182.50	90
Y531A	4	100	4	31.08	124.32	72
Y551A	5	100	5	34.83	174.15	90
Y552A	2	100	2	35.25	70.50	36
Y553A	2	100	2	34.83	69.66	36
Y5COP	1	100	1	51.25	51.25	18
Y5C1P	4	100	4	50.92	203.68	72
Y5C2B	4	100	4	83.75	335.00	72
Y653B	3	100	3	70.33	210.99	54
Y654B	1	100	1	71.17	71.17	18
Y805R	1	100	1	41.50	41.50	18
Y806B	4	100	4	45.75	183.00	72
Y807A	19	100	19	45.75	869.25	342
Y807B	3	100	3	45.75	137.25	54
Y809R	3	100	3	41.50	124.50	54
Y840A	3	100	3	41.08	123.24	54
Y841A	2	100	2	31.25	62.50	36
			<u>S = 270</u>		<u>Q = 11668.31</u>	<u>L = 4860</u>

$$A = 11668.31 / 270 = 43.22$$

$$T = 16637 \text{ for the third quarter (Appendix B)}$$

$$P = 11668.31 / 16637 = .701$$

July - September 1986 (4th Quarter)

P541A	JUL	3	100	3	11.00	33.00	54
P555A		4	100	4	41.58	166.32	72
P557A		2	100	2	34.83	69.66	36
P577A		4	100	4	32.58	130.32	72
P501A		4	100	4	35.00	140.00	72
P503A		1	100	1	35.58	35.58	18
P641A		1	100	1	13.92	13.92	18
P841A		5	100	5	12.58	62.90	90
P851A		4	100	4	36.42	145.68	72
Y531A		5	100	5	31.75	158.75	90
Y551A		4	100	4	34.83	139.32	72
Y552A		2	100	2	35.58	71.16	36
Y553A		3	100	3	34.83	104.49	54
Y5COP		1	100	1	51.58	51.58	18
Y5C1P		3	100	3	51.00	153.00	54
Y5C2B		3	100	3	83.75	251.25	54
Y5C2B		1	100	1	83.75	83.75	18
Y805R		1	100	1	41.67	41.67	18
Y806A		3	100	3	45.75	137.25	54
Y807A		24	100	24	45.75	1098.00	432
Y809R		3	100	3	41.67	125.01	54
Y840A		2	100	2	42.08	84.16	36
Y841A		2	100	2	31.75	63.50	36
P555A	AUG	4	100	4	41.92	167.68	72
P577A		4	100	4	39.17	156.68	72
P501A		4	100	4	35.08	140.32	72
P851A		4	100	4	36.92	147.68	72
Y531A		4	100	4	31.42	125.68	72
Y551A		5	100	5	35.25	176.25	90
Y552A		2	100	2	35.83	71.66	36
Y553A		2	100	2	35.25	70.50	36
Y5COP		1	100	1	51.83	51.83	18
Y5C1P		3	100	3	51.08	153.24	54
Y5C2A		5	100	5	84.17	420.85	90
Y653A		3	100	3	71.00	213.00	54
Y654A		1	100	1	71.83	71.83	18
Y805R		1	100	1	41.67	41.67	18
Y806A		4	100	4	45.75	183.00	72
Y807A		23	100	23	45.75	1052.25	414
Y809R		3	100	3	41.67	125.01	54
Y840A		2	100	2	41.58	83.16	36
Y841A		2	100	2	31.50	63.00	36

P541A	SEP	4	100	4	11.08	44.32	72
P555A		2	100	2	42.00	84.00	36
P556A		3	100	3	46.00	138.00	54
P577A		2	100	2	39.08	78.16	36
P578A		2	100	2	43.08	86.16	36
P5C1A		4	100	4	36.08	144.32	72
P641A		2	100	2	13.92	27.84	36
P6K2A		3	50 NPAC	1.5	31.42	47.13	27
P805T		9	100	9	45.75	411.75	162
P805T		1	100	1	45.75	45.75	18
P806T		13	100	13	41.50	539.50	234
P806T		3	100	3	41.50	124.50	54
P810T		1	100	1	45.75	45.75	18
P811T		3	100	3	41.50	124.50	54
P841A		5	100	5	12.50	62.50	90
P851A		5	100	5	36.83	184.15	90
Y531A		5	100	5	31.67	158.35	90
Y551A		4	100	4	35.42	141.68	72
Y552A		2	100	2	36.08	72.16	36
Y553A		1	100	1	35.42	35.42	18
Y553A		1	100	1	35.42	35.42	18
Y5C1P		2	100	2	50.75	101.50	36
Y5C2A		4	100	4	84.58	338.32	72
Y5C6P		3	100	3	55.92	167.76	54
Y653A		4	100	4	70.83	283.32	72
Y654A		1	100	1	71.67	71.67	18
Y840A		2	100	2	42.08	84.16	36
Y841A		3	100	3	31.83	95.49	54

$$S = \frac{254.5}{}$$

$$Q = \frac{10649.14}{}$$

$$L = \frac{4581}{}$$

$$A = 10649.14 / 254.5 = 41.84$$

$$T = 16594 \text{ for the fourth quarter (Appendix B)}$$

$$P = 10649.14 / 16594 = .642$$

SUU - NPAC  
April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct NPAC	Msns for NPAC	Msn Flight Time	Fly Hours NPAC	Actual Capability Tons
P5K3P JUN	1	100	1	31.33	31.33	18
P5K5P	2	100	2	28.50	57.00	36
P5K5P	1	100	$\frac{1}{4}$	28.50	28.50	18
			S = 4		Q = 116.83	L = 72

A = 116.83 / 4 = 29.21  
T = 16637 for the third quarter (Appendix B)  
P = 116.83 / 16637 = .007

July - September 1986 (4th Quarter)

P5K3P JUL	1	100	1	31.08	31.08	18
P5K5P	3	100	3	27.75	83.25	54
P5K5P	1	100	1	27.75	27.75	18
P5K3P AUG	1	100	1	31.08	31.08	18
P5K5P SEP	2	100	2	27.50	55.00	36
P5K6P	2	100	2	27.08	54.16	36
P6K2A	3	50 CPAC	$\frac{1.5}{4}$	31.42	47.13	27
			S = 11.5		Q = 329.45	L = 207

A = 329.45 / 11.5 = 28.65  
T = 16594 for the fourth quarter (Appendix B)  
P = 329.45 / 16594 = .020

DOV - MED (21 AF) from SUU (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
P5T1A MAY	2	100	$S = \frac{2}{2}$	37.67	$Q = \frac{75.34}{75.34}$	$L = \frac{36}{36}$

A =  $75.34 / 2 = 37.67$   
 T = 16637 for the third quarter (Appendix B)  
 P =  $75.34 / 16637 = .005$

July - September 1986 (4th Quarter)

S5T1A AUG	1	100	1	38.58	38.58	18
S5T1A SEP	1	100	$S = \frac{1}{2}$	37.75	$Q = \frac{37.75}{76.33}$	$L = \frac{18}{36}$

A =  $76.33 / 2 = 38.17$   
 T = 16594 for the fourth quarter (Appendix B)  
 P =  $76.33 / 16594 = .005$

DOV - M/E (21 AF) from SUU (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct M/E	Msns for M/E	Msn Flight Time	Fly Hours M/E	Actual Capability Tons
S5W3A JUN	2	100	$S = \frac{2}{2}$	44.42	$Q = \frac{88.84}{88.84}$	$L = \frac{36}{36}$

A =  $88.84 / 2 = 44.42$   
 T = 16637 for the third quarter (Appendix B)  
 P =  $88.84 / 16637 = .005$

July - September 1986 (4th Quarter)

S5W3A JUL	1	100	1	44.42	44.42	18
S5W3A AUG	2	100	2	43.50	87.00	36
S5W3A SEP	1	100	$S = \frac{1}{4}$	43.50	$Q = \frac{43.50}{174.92}$	$L = \frac{18}{72}$

A =  $174.92 / 4 = 43.73$   
 T = 16594 for the fourth quarter (Appendix B)  
 P =  $174.92 / 16594 = .010$

WRI - MED (21 AF) from SUU (22 AF)  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
S5V3A JUN	1	100	$S = \frac{1}{1}$	33.83	$Q = \frac{33.83}{33.83}$	$L = \frac{18}{18}$

$A = 33.83 / 1 = 33.83$   
 $T = 16637$  for the third quarter (Appendix B)  
 $P = 33.83 / 16637 = .002$

July - September 1986 (4th Quarter)

S5V3A JUL	2	100	$S = \frac{2}{2}$	33.83	$Q = \frac{67.66}{67.66}$	$L = \frac{36}{36}$
-----------	---	-----	-------------------	-------	---------------------------	---------------------

$A = 67.66 / 2 = 33.83$   
 $T = 16594$  for the fourth quarter (Appendix B)  
 $P = 67.66 / 16594 = .004$

Pacific Region (C-5)

SUU - CPAC  
October - December 1986 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct CPAC	Msns for CPAC	Msn Flight Time	Fly Hours CPAC	Actual Capability Tons
P353A OCT	3	100	3	30.25	90.75	135
P371A	5	100	5	27.83	139.15	225
P3C1A	2	100	2	29.83	59.66	90
P3K2A	4	50 NPAC	2	27.17	54.34	90
P353A NOV	2	100	2	29.83	59.66	90
P371A	5	100	5	27.83	139.15	225
P3C1A	2	100	2	30.50	61.00	90
P3K2A	2	50 NPAC	1	27.17	27.17	45
P3K2A	1	50 NPAC	0.5	27.17	13.59	22.5
P353A DEC	5	100	5	30.75	153.75	225
P353A	1	100	1	30.75	30.75	45
P371A	4	100	4	28.83	115.32	180
P3C1A	2	100	2	30.92	61.84	90
P3K2A	5	50 NPAC	2.5	27.83	69.58	112
			S = 37.0		Q = 1075.71	L = 1664.5

A = 1075.71 / 37 = 29.07  
T = 2926 for the first quarter (Appendix B)  
P = 1075.71 / 2926 = .368

January - March 1986 (2nd Quarter)

P353A JAN	2	100	2	30.58	61.16	90
P371A	5	100	5	28.58	142.90	225
P361A	3	100	3	31.08	93.24	135
P3K2A	4	50 NPAC	2	27.75	55.50	90
P351A FEB	4	100	4	30.17	120.68	180
P353A	2	100	2	30.17	60.34	90
P371A	4	100	4	28.08	112.32	180
P301A	2	100	2	30.42	60.84	90
P3K2A	4	50 NPAC	2	27.50	55.00	90
P350A MAR	4	100	4	30.50	122.00	180
P351A	1	100	1	30.50	30.50	45
P353A	2	100	2	30.25	60.50	90
P371A	4	100	4	28.33	113.32	180
P3C1A	2	100	2	30.75	61.50	90
P3K2A	5	50 NPAC	2.5	27.58	68.95	112.5
			S = 41.5		Q = 1218.75	L = 1867.5

A = 1218.75 / 41.5 = 29.37  
T = 2644 for the second quarter (Appendix B)  
P = 1218.75 / 2644 = .461

April - June 1986 (3rd Quarter)

P341A	APR	4	100	4	10.67	42.68	180
P351A		4	100	4	30.92	123.68	180
P353A		3	100	3	30.92	92.76	135
P371A		4	100	4	28.75	115.00	180
PC1A		2	100	2	31.17	62.34	90
P3K2A		4	50 NPAC	2	29.17	58.34	90
P351A	MAY	4	100	4	30.25	121.00	180
P351A		1	100	1	30.25	30.25	45
P353A		2	100	2	30.25	60.50	90
P370A		1	100	1	31.50	31.50	45
P371A		4	100	4	28.08	112.32	180
P387A		1	50 NPAC	0.5	23.67	11.84	22.5
P3COP		1	100	1	37.83	37.83	45
P3C1P		1	100	1	30.67	30.67	45
P3K2A		2	50 NPAC	1	27.33	27.33	45
P3K2A		1	50 NPAC	0.5	27.33	13.67	22.5
RNK5A		1	100	1	39.17	39.17	45
P341A	JUN	4	100	4	10.58	42.32	180
P351A		4	100	4	30.17	120.68	180
P352A		2	100	2	29.92	59.84	90
P353A		2	100	2	30.17	60.34	90
P370A		1	100	1	31.25	31.25	45
P371A		3	100	3	27.75	83.25	135
P3COP		1	100	1	33.58	33.58	45
P3C1A		1	100	1	31.17	31.17	45
P3K2A		6	50 NPAC	3	26.75	80.25	135
P3K3A		1	50 NPAC	0.5	28.33	14.17	22.5
P3K4A		1	50 NPAC	0.5	28.58	14.29	22.5
P3K5A		1	50 NPAC	0.5	28.57	14.29	22.5
PNK5A		1	50 NPAC	0.5	34.50	17.25	22.5
				S =	59.0	Q = 1613.56	L = 2655.0

$$A = 1613.56 / 59.0 = 27.35$$

$$T = 2488 \text{ for the third quarter (Appendix B)}$$

$$P = 1613.56 / 2488 = .648$$

July - September 1986 (4th Quarter)

P341A	JUL	4	100	4	10.58	42.32	180
P350A		1	100	1	30.08	30.08	45
P351A		6	100	6	31.33	187.98	270
P353A		1	100	1	31.33	331.33	45
P354A		1	100	1	33.42	33.42	45
P370A		1	100	1	31.33	31.33	45
P371A		3	100	3	28.83	86.49	135
P3C1A		3	100	3	31.42	94.26	135
P3K0A		1	50 NPAC	0.5	28.22	14.17	22.5
P3K2A		9	50 NPAC	4.5	27.42	123.39	202.5
P3K2A		1	50 NPAC	0.5	27.42	13.71	22.5
P3K5A		1	50 NPAC	0.5	29.58	14.79	22.5
PN81A		1	50 NPAC	0.5	34.17	17.09	22.5
P350A	AUG	1	100	1	30.50	30.50	45
P351A		4	100	4	31.42	125.68	180
P353A		1	100	1	31.42	31.42	45
P354A		1	100	1	33.50	33.50	45
P370A		1	100	1	31.50	31.50	45
P371A		4	100	4	28.75	115.00	180
P3C1A		2	100	2	31.42	62.84	90
P3K2A		4	50 NPAC	2	27.08	54.16	90
P351A	SEP	1	100	1	31.25	31.25	45
P352A		1	100	1	34.00	34.00	45
P352A		3	100	3	34.00	102.00	135
P353A		1	100	1	31.25	31.25	45
P371A		1	100	1	28.58	28.58	45
P372A		3	100	3	31.25	93.75	135
P3C1A		2	100	2	33.67	67.34	90
P3K2A		3	50 NPAC	1.5	27.25	40.88	67.5
P3K3A		6	50 NPAC	3	33.58	100.74	135
RN81A		1	50 NPAC	0.5	34.17	17.09	22.5
				S =	59.5	Q = 1751.84	L = 2677.5

$$A = 1751.84 / 59.5 = 29.44$$

$$T = 2947 \text{ for the fourth quarter (Appendix B)}$$

$$P = 1751.84 / 2947 = .595$$

SUU - NPAC  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct NPAC	Msns for NPAC	Msn Flight Time	Fly Hours NPAC	Actual Capability Tons
P31KP OCT	4	100	4	24.42	97.68	180
P31KP	1	100	1	24.42	24.42	45
P3K2A	4	50 CPAC	2	27.17	54.34	90
P3K1P NOV	4	100	4	24.25	97.00	180
P3K2A DEC	2	50 CPAC	<u>2.5</u>	27.83	<u>69.58</u>	<u>112</u>
			S = 13.5		Q = 343.02	L = 607

A = 343.02 / 13.5 = 25.41  
T = 2926 for the first quarter (Appendix B)  
P = 343.02 / 2926 = .117

January - March 1986 (2nd Quarter)

P3K1P JAN	3	100	3	24.67	74.01	135
P3K1P	1	100	1	24.67	24.67	45
P3K2A	4	50 CPAC	2	27.75	55.50	90
P3K2A FEB	4	50 CPAC	2	27.50	55.00	90
P3K2A MAR	5	50 CPAC	<u>2.5</u>	27.58	<u>68.95</u>	<u>112.5</u>
			S = 10.5		Q = 278.13	L = 472.5

A = 278.13 / 10.5 = 26.49  
T = 2644 for the second quarter (Appendix B)  
P = 278.13 / 2644 = .105

April - June 1986 (3rd Quarter)

P3K2A	APR	4	50 CPAC	2.0	29.17	58.34	90.0
P387A	MAY	1	50 CPAC	0.5	23.67	11.84	22.5
P3K2A		2	50 CPAC	1.0	27.33	27.33	45.0
P3K2A		1	50 CPAC	0.5	27.33	13.67	22.5
P3K2A	JUN	6	50 CPAC	3.0	26.75	80.25	135.0
P3K3A		1	50 CPAC	0.5	28.33	14.17	22.5
P3K4A		1	50 CPAC	0.5	28.58	14.29	22.5
P3K5A		1	50 CPAC	0.5	28.58	14.29	22.5
RNK5A		1	50 CPAC	<u>0.5</u>	34.50	<u>17.25</u>	<u>22.5</u>
				S = 9.0		Q = 251.43	L = 405.0

$$A = 251.43 / 9 = 27.94$$

$$T = 2488 \text{ for the third quarter (Appendix B)}$$

$$P = 251.43 / 2488 = .101$$

July - September 1986 (4th Quarter)

P3K0A	JUL	1	50 CPAC	0.5	28.33	14.17	22.5
P3K2A		9	50 CPAC	4.5	27.42	123.39	202.5
P3K2A		1	50 CPAC	0.5	27.42	13.71	22.5
P3K5A		1	50 CPAC	0.5	29.58	14.79	22.5
RN81A		1	50 CPAC	0.5	34.17	17.09	22.5
P3K2A	AUG	4	50 CPAC	2.0	27.08	54.16	90.0
P3K2A	SEP	3	50 CPAC	1.5	27.25	40.88	67.5
P3K3A		6	50 CPAC	3.0	33.58	100.74	135.0
RN81A		1	50 CPAC	<u>0.5</u>	34.17	<u>17.09</u>	<u>22.5</u>
				S = 13.5		Q = 396.02	L = 607.5

$$A = 396.02 / 13.5 = 29.33$$

$$T = 2947 \text{ for the fourth quarter (Appendix B)}$$

$$P = 396.02 / 2947 = .134$$

TIK - GER (21 AF) from SUU (22 AF)  
 October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct GER	Msns for GER	Msn Flight Time	Fly Hours GER	Actual Capability Tons
S3M6A OCT	14	100	14	30.25	423.50	630
S3R3A	4	100	4	29.58	118.32	180
S3M5A NOV	1	100	1	30.25	30.25	45
S3M6A	11	100	11	30.25	332.75	495
S3R5A	5	100	5	30.00	150.00	225
S3M6A DEC	11	100	11	30.25	332.75	495
S3R5A	4	100	4	30.00	120.00	180
			S = 50		Q = 1507.57	L = 2250

$A = 1507.57 / 50 = 30.15$   
 $T = 2926$  for the first quarter (Appendix B)  
 $P = 1507.57 / 2926 = .515$

January - March 1986 (2nd Quarter)

S3M6A JAN	14	100	14	30.25	423.50	630
S3R5A	4	100	4	30.00	120.00	180
S3M6A FEB	12	100	12	30.25	363.00	540
S3R5A	4	100	4	30.00	120.00	180
S3M6A MAR	4	100	4	30.25	121.00	180
			S = 38		Q = 1147.50	L = 1710

$A = 1147.50 / 38 = 30.20$   
 $T = 2644$  for the second quarter (Appendix B)  
 $P = 1147.50 / 2644 = .434$

April - June 1986 (3rd Quarter)

S3M6A APR	5	100	5	29.25	146.25	225
S3F2A MAY	1	100	1	28.58	28.58	45
S3F3A	1	100	1	30.67	30.67	45
S3F5A	1	100	1	29.25	29.25	45
S3F6A	1	100	1	30.67	30.67	45
S3R0A	2	100	2	28.58	28.58	90
S3R5A	1	100	1	29.25	29.25	45
S3R7A	1	100	1	30.08	30.08	45
S3R8A	1	100	1	30.08	30.08	45
S3R5A JUN	4	100	4	30.00	120.00	180
S3R5A	4	100	4	30.00	<u>120.00</u>	<u>180</u>
			S = 22		Q = 623.41	L = 990

$$A = 623.41 / 22 = 28.34$$

$$T = 2488 \text{ for the third quarter (Appendix B)}$$

$$P = 623.41 / 2488 = .251$$

July - September 1986 (4th Quarter)

S3R5A JUL	9	100	9	32.33	290.97	405
S3R5A AUG	9	100	9	29.33	263.97	405
S3F5A SEP	4	100	4	30.67	122.68	180
S3R5A	4	100	4	30.50	<u>122.00</u>	<u>180</u>
			S = 26		Q = 799.62	L = 1170

$$A = 799.62 / 26 = 30.75$$

$$T = 2947 \text{ for the fourth quarter (Appendix B)}$$

$$P = 799.62 / 2947 = .271$$

Atlantic Region (C-141)

DOV -GER  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct GER	Msns for GER	Msn Flight Time	Fly Hours GER	Actual Capability Tons
A4V1A OCT	5	100	5	24.33	121.65	100
G4J1A	2	100	2	32.92	65.84	40
G4Q1A	2	50 M/E	1	30.17	30.17	20
G4Q3A	2	50 M/E	1	30.17	30.17	20
G7J2A	2	100	2	30.92	61.84	40
A4V1A NOV	4	100	4	24.33	97.32	80
G4J1A	2	100	2	32.92	65.84	40
G4J2B	1	100	1	33.42	33.42	20
G4J4A	1	100	1	33.67	33.67	20
G4Q1A	2	50 M/E	1	30.17	30.17	20
G4Q3A	3	50 M/E	1.5	30.17	45.26	30
A4V1A DEC	3	100	3	24.33	72.99	60
G4J1B	2	100	2	32.92	65.84	40
G4J1B	1	100	1	32.92	32.92	20
G4J2A	2	100	2	33.42	66.84	40
G4Q1B	2	50 M/E	1	30.17	30.17	20
G4Q3B	2	50 M/E	1	30.17	30.17	20
			<u>S = 31.5</u>		<u>Q = 914.28</u>	<u>L = 630</u>

A = 914.28 / 31.5 = 29.02  
T = 13794 for the first quarter (Appendix B)  
P = 914.28 / 13794 = .066

January - March 1986 (2nd Quarter)

A4V1A JAN	5	100	5	24.33	121.65	100
G4J1B	2	100	2	32.92	65.84	40
G4Q1C	2	50 M/E	1	30.17	30.17	20
G4Q3B	2	50 M/E	1	30.25	30.25	20
G7J1A	2	100	2	30.83	61.66	40
G4J1B FEB	2	100	2	32.92	65.84	40
G4J2A	2	100	2	33.33	66.66	40
G4Q1B	2	50 M/E	1	30.17	30.17	20
G4Q3B	2	50 M/E	1	30.17	30.17	20
G4JOA MAR	1	100	1	33.08	33.08	20
G4J1A	2	100	2	32.92	65.84	40
G4J2A	2	100	2	33.33	66.66	40
G4Q1A	3	50 M/E	1.5	30.25	45.38	30
G4Q3A	2	50 M/E	1	30.25	30.25	20
			<u>S = 24.5</u>		<u>Q = 743.62</u>	<u>L = 490</u>

A = 743.62 / 24.5 = 30.35  
T = 13954 for the second quarter (Appendix B)  
P = 743.62 / 13954 = .053

April - June 1986 (3rd Quarter)

G4J1A	APR	2	100	2	32.92	65.84	40
G4J2A		2	100	2	33.08	66.16	40
G4Q1A		2	50 M/E	1	30.17	30.17	20
G4Q3A		2	50 M/E	1	30.17	30.17	20
G4JOB	MAY	1	100	1	33.50	33.50	20
G4J1A		1	100	1	32.92	32.92	20
G4J2B		1	100	1	33.33	33.33	20
G4J3A		1	100	1	31.67	31.67	20
G4Q0A		1	50 M/E	0.5	30.17	15.08	10
G4Q1A		1	50 M/E	0.5	30.17	15.08	10
G4Q2A		1	50 M/E	0.5	30.17	15.08	10
G4Q3A		1	50 M/E	0.5	30.17	15.08	10
G4J1A	JUN	2	100	2	32.92	65.84	40
G4J2A		3	100	3	33.08	99.24	60
G4Q1A		2	50 M/E	1	30.17	30.17	20
G4Q3A		2	50 M/E	1	30.17	30.17	20
G4Q3A		1	50 M/E	0.5	30.17	15.08	10
				S =	19.5	Q = 624.58	L = 390

$$A = 624.58 / 19.5 = 32.03$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 624.58 / 14055 = .044$$

July - September (4th Quarter)

G4J1A	JUL	2	100	2	32.92	65.84	40
G4J2A		2	100	2	33.17	66.34	40
G4Q1A		2	50 M/E	1	30.17	30.17	20
G4Q3A		2	50 M/E	1	30.17	30.17	20
G4J1A	AUG	3	100	3	32.92	98.76	60
G4J2B		1	100	1	33.17	33.17	20
G4J3B		1	100	1	33.33	33.33	20
G4Q1A		2	50 M/E	1	30.17	30.17	20
G4Q3A		2	50 M/E	1	30.17	30.17	20
G4J1A	SEP	2	100	2	32.92	65.84	40
G4J2B		2	100	2	33.17	66.34	40
G4Q1A		3	50 M/E	1.5	30.17	45.25	30
G4Q3A		2	50 M/E	1	30.17	30.17	20
				S =	19.5	Q = 625.72	L = 390

$$A = 625.72 / 19.5 = 32.09$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 625.72 / 12470 = .050$$

DOV - MED  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
A4J3A OCT	5	100	5	36.50	182.50	100
A4V3A	4	100	4	24.92	99.68	80
A7A1A	3	100	3	24.67	74.01	60
A7A2A	1	100	1	24.58	24.58	20
A7T1A	5	100	5	27.67	138.35	100
A4A1B NOV	3	100	3	26.42	79.26	60
A4J3A	4	100	4	36.50	146.00	80
A4V3A	5	100	5	24.92	124.60	100
A7A1A	1	100	1	24.67	24.67	20
A7A2A	1	100	1	24.67	24.67	20
A7T1A	4	100	4	28.08	112.32	80
A4A1A DEC	3	100	3	26.42	79.26	60
A4A2A	1	100	1	26.42	26.42	20
A4J3A	4	100	4	36.50	146.00	80
A4V3A	4	100	4	24.92	99.68	80
A7TOA	1	100	1	28.08	28.08	20
A7T1A	3	100	3	28.08	84.24	60
			S = 52		Q = 1494.32	L = 1040

A = 1494.32 / 52 = 28.74

T = 13794 for the first quarter (Appendix B)

P = 1494.32 / 13794 = .108

January - March 1986 (2nd Quarter)

A4J3A JAN	5	100	5	36.50	182.50	100
A4V3A	4	100	4	24.83	99.32	80
A7A1A	3	100	3	24.58	73.74	60
A7A2A	1	100	1	24.58	24.58	20
A7T1A	5	100	5	27.92	139.60	100
A4J3A FEB	4	100	4	36.50	146.00	80
A7T1A	4	100	4	28.17	112.68	80
A4JOA MAR	1	100	1	36.50	36.50	20
A4J3A	3	100	3	36.50	109.50	60
A7T1A	4	100	4	27.92	111.68	80
			S = 34		Q = 1036.10	L = 680

A = 1036.10 / 34 = 30.47

T = 13954 for the second quarter (Appendix B)

P = 1036.10 / 13954 = .074

April - June 1986 (3rd Quarter)

A4J3A APR	4	100	4	36.50	146.00	80
A7T1A	4	100	4	27.92	111.68	80
A4J3A MAY	2	100	2	36.50	73.00	40
A4J4A	1	100	1	36.50	36.50	20
A4J5A	1	100	1	36.25	36.25	20
A4J7A	1	100	1	36.75	36.75	20
A7T1A	5	100	5	27.92	139.60	100
A7T1A JUN	4	100	4	27.92	111.68	80
			$S = \frac{4}{22}$		$Q = \frac{691.46}{22}$	$L = \frac{440}{22}$

$A = 691.46 / 22 = 31.43$   
 $T = 14055$  for the third quarter (Appendix B)  
 $P = 691.46 / 14055 = .049$

July - September (4th Quarter)

A7T1A JUL	5	100	$\frac{5}{5}$	27.92	$\frac{139.60}{5}$	$\frac{100}{5}$
			$S = \frac{5}{5}$		$Q = \frac{139.60}{5}$	$L = \frac{100}{5}$

$A = 139.60 / 5 = 27.92$   
 $T = 12470$  for the fourth quarter (Appendix B)  
 $P = 139.60 / 12470 = .011$

DOV - M/E  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct M/E	Msns for M/E	Msn Flight Time	Fly Hours M/E	Actual Capability Tons
G4Q1A OCT	2	50 GER	1	30.17	30.17	20
G4Q3A	2	50 GER	1	30.17	30.17	20
G4Q1A NOV	2	50 GER	1	30.17	30.17	20
G4Q3A	3	50 GER	1.5	30.17	45.26	30
G4Q1B DEC	2	50 GER	1	30.17	30.17	20
G4Q3B	2	50 GER	1	30.17	30.17	20
			S = 6.5	Q = 196.11		L = 130

A = 196.11 / 6.5 = 30.17  
T = 13794 for the first quarter (Appendix B)  
P = 196.11 / 13794 = .014

January - March 1986 (2nd Quarter)

G4Q1C JAN	2	50 GER	1	30.17	30.17	20
G4Q3B	2	50 GER	1	30.25	30.25	20
G4Q1B FEB	2	50 GER	1	30.17	30.17	20
G4Q3B	2	50 GER	1	30.17	30.17	20
G4Q1A MAR	3	50 GER	1.5	30.25	45.38	30
G4Q3A	2	50 GER	1	30.25	30.25	20
			S = 6.5	Q = 196.39		L = 130

A = 196.39 / 6.5 = 30.21  
T = 13954 for the second quarter (Appendix B)  
P = 196.39 / 13954 = .014

April - June 1986 (3rd Quarter)

G4Q1A APR	2	50 GER	1.0	30.17	30.17	20
G4Q3A	2	50 GER	1.0	30.17	30.17	20
G4Q0A MAY	1	50 GER	0.5	30.17	15.08	10
G4Q1A	1	50 GER	0.5	30.17	15.08	10
G4Q2A	1	50 GER	0.5	30.17	15.08	10
G4Q3A	1	50 GER	0.5	30.17	15.08	10
G4Q1A JUN	2	50 GER	1.0	30.17	30.17	20
G4Q3A	2	50 GER	1.0	30.17	30.17	20
G4Q3A	1	50 GER	<u>0.5</u>	30.17	<u>15.08</u>	<u>10</u>
			S = 6.5		Q = 196.08	L = 130

$$A = 196.08 / 6.5 = 30.17$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 196.08 / 14055 = .014$$

July - September 1986 (4th Quarter)

G4Q1A JUL	2	50 GER	1.0	30.17	30.17	20
G4Q3A	2	50 GER	1.0	30.17	30.17	20
G4Q1A AUG	2	50 GER	1.0	30.17	30.17	20
G4Q3A	2	50 GER	1.0	30.17	30.17	20
G4Q1A SEP	3	50 GER	1.5	30.17	45.25	30
G4Q3A	2	50 GER	<u>1</u>	30.17	<u>30.17</u>	<u>20</u>
			S = 6.5		Q = 196.10	L = 130

$$A = 196.10 / 6.5 = 30.17$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 196.10 / 12470 = .016$$

WRI - LGS  
October - December 1986 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct LGS	Msns for LGS	Msn Flight Time	Fly Hours LGS	Actual Capability Tons
A769A OCT	4	50 N/C	2	16.42	32.84	40
G704A	4	50 MED	2	29.83	59.66	40
G705A	5	50 MED	2.5	33.58	83.95	50
G706A	4	50 MED	2	33.25	66.50	40
G7F7A	7	100	7	20.08	140.56	140
G7F8A	3	100	3	20.08	60.24	60
G7K7A	2	50 N/C	1	17.67	17.67	20
A769A NOV	4	50 N/C	2	16.42	32.84	40
G704B	4	50 MED	2	29.83	59.66	40
G705B	4	50 MED	2	33.58	67.16	40
G706B	5	50 MED	2.5	33.25	83.13	50
G7F7A	6	100	6	20.08	120.48	120
G7F8A	2	100	2	20.08	40.16	40
G7K7A	3	50 N/C	1.5	17.67	26.51	30
A769A DEC	5	50 N/C	2.5	16.42	41.05	50
G704D	4	50 MED	2	29.42	58.84	40
G705C	3	50 MED	1.5	33.83	50.75	30
G706C	3	50 MED	1.5	33.50	50.25	30
G707A	1	50 MED	0.5	33.50	16.75	10
G7F7A	5	100	5	20.08	100.40	100
G7F8A	2	100	2	20.08	40.16	40
G7K7A	2	50 N/C	1	17.67	17.67	20
			S = 53.5		Q = 1267.23	L = 1070

A = 1267.23 / 53.5 = 23.69  
T = 13794 for the first quarter (Appendix B)  
P = 1267.23 / 13794 = .092

January - March 1986 (2nd Quarter)

A769A	JAN	4	50 N/C	2	16.42	32.84	40
G704C		4	50 MED	2	29.42	58.84	40
G705C		5	50 MED	2.5	33.83	84.58	50
G706C		4	50 MED	2	33.50	67.00	40
G7F7A		7	100	7	20.08	140.56	140
G7F8A		2	100	2	20.08	40.16	40
G7K7A		2	50 N/C	1	17.67	17.67	20
A769A	FEB	4	50 N/C	2	16.42	32.84	40
G714A		4	50 MED	2	30.42	60.84	40
G715A		4	50 MED	2	33.33	66.66	40
G716A		4	50 MED	2	33.17	66.34	40
G7F7A		6	100	6	20.08	120.48	120
G7F8A		2	100	2	20.08	40.16	40
G7K7A		2	50 N/C	1	17.67	17.67	20
A769A	MAR	5	50 N/C	2.5	16.42	41.05	50
G704B		5	50 MED	2.5	30.42	76.05	50
G705B		4	50 MED	2	33.33	66.66	40
G706B		5	50 MED	2.5	33.17	82.93	50
G7F7A		6	100	6	20.17	121.02	120
G7F8A		2	100	2	20.17	40.34	40
G7K7A		3	50 N/C	1.5	17.75	26.63	30
				S =	54.5	Q = 1301.32	L = 1090

$$A = 1301.32 / 54.5 = 23.88$$

$$T = 13954 \text{ for the second quarter (Appendix B)}$$

$$P = 1301.32 / 13954 = .093$$

April - June 1986 (3rd Quarter)

A769A	APR	4	50 N/C	2	16.42	32.84	40
G714A		4	50 MED	2	30.42	60.84	40
G715A		5	50 MED	2.5	33.33	83.33	50
G716A		4	50 MED	2	33.17	66.34	40
G7F7A		7	100	7	20.17	141.19	140
G7F8A		2	100	2	20.17	40.34	40
G7K7A		2	50 N/C	1	17.75	17.75	20
A769P	MAY	4	50 N/C	2	16.42	32.84	40
G704A		4	50 MED	2	30.42	60.84	40
G705A		4	50 MED	2	33.33	66.66	40
G706A		5	50 MED	2.5	33.17	82.93	50
G7F7A		6	100	6	20.08	120.48	120
G7F8A		3	100	3	20.08	60.24	60
G7K7A		2	50 N/C	1	17.67	17.67	20
A769A	JUN	5	50 N/C	2.5	16.42	41.05	50
G704A		5	50 MED	2.5	30.67	76.68	50
G705A		4	50 MED	2	33.58	67.16	40
G706A		4	50 MED	2	33.42	66.84	40
G7F7A		6	100	6	20.17	121.02	120
G7F8A		2	100	2	20.17	40.34	40
G7K7A		2	50 N/C	1	17.75	17.75	20
				S =	55	Q = 1315.13	L = 1100

$$A = 1315.13 / 55 = 23.91$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 1315.13 / 14055 = .094$$

July - September 1986 (4th Quarter)

G714A	JUL	4	50 MED	2	30.42	60.84	40
G715A		5	50 MED	2.5	33.33	83.33	50
G716A		4	50 MED	2	33.17	66.34	40
G7F7B		8	100	8	20.00	160.00	160
G7F8A		2	100	2	20.00	40.00	40
G7K7A		2	50 N/C	1	17.58	17.58	20
A7A1A	AUG	4	50 MED	2	24.33	48.66	40
A7A2A		1	50 MED	0.5	24.33	12.17	10
G714A		4	50 MED	2	30.58	61.16	40
G715A		4	50 MED	2	33.50	67.00	40
G716A		5	50 MED	2.5	33.33	83.33	50
G7F7A		6	100	6	20.00	120.00	120
G7F8A		2	100	2	20.00	40.00	40
G7K7A		3	50 N/C	1.5	17.58	26.37	30
A7A1A	SEP	3	50 MED	1.5	24.33	36.50	30
A7A2A		1	50 MED	0.5	24.33	12.17	10
G714A		5	50 MED	2.5	30.58	76.45	50
G715A		4	50 MED	2	33.50	67.00	40
G716A		4	50 MED	2	33.33	66.66	40
G7F7B		7	100	7	20.00	140.00	140
G7F8A		2	100	2	20.00	40.00	40
G7K7A		2	50 N/C	<u>1</u>	17.58	<u>17.58</u>	<u>20</u>
				L =	<u>54.5</u>	Q = 1343.14	L = 1090

$$A = 1343.14 / 54.5 = 24.64$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 1343.14 / 12470 = .108$$

WRI - MED  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
G700A OCT	9	100	9	30.83	277.47	180
G702A	5	100	5	31.17	155.85	100
G703A	4	100	4	31.42	125.68	80
G704A	4	50 LGS	2	29.83	59.66	40
G705A	5	50 LGS	2.5	33.58	83.95	50
G706A	4	50 LGS	2	33.25	66.50	40
G700A NOV	9	100	9	30.83	277.47	180
G702A	4	100	4	31.17	124.68	80
G703A	4	100	4	31.42	125.68	80
G704B	4	50 LGS	2	29.83	59.66	40
G705B	4	50 LGS	2	33.58	67.16	40
G706B	5	50 LGS	2.5	33.25	83.13	50
G700B DEC	7	100	7	31.08	217.56	140
G702B	4	100	4	31.42	125.68	80
G703B	4	100	4	31.67	126.68	80
B704D	4	50 LGS	2	29.42	58.84	40
G705C	3	50 LGS	1.5	33.83	50.75	30
G706C	3	50 LGS	1.5	33.50	50.25	30
G707A	1	50 LGS	0.5	33.50	16.75	10
G708A	1	100	1	28.33	28.33	20
G709A	1	100	1	31.08	31.08	20
			$S = \frac{70.5}{}$	$Q = \frac{2212.81}{}$	$L = \frac{1410}{}$	

A = 2212.81 / 70.5 = 31.39

T = 13794 for the first quarter (Appendix B)

P = 2212.81 / 13794 = .160

January - March 1986 (2nd Quarter)

G700B	JAN	5	100	5	31.08	155.40	100
G702B		4	100	4	31.42	125.68	80
G703B		4	100	4	31.67	126.68	80
G704C		4	50 LGS	2	29.42	58.84	40
G705C		5	50 LGS	2.5	33.83	84.58	50
G706C		4	50 LGS	2	33.50	67.00	40
G710A		5	100	5	31.08	155.40	100
A4V1A	FEB	4	100	4	24.58	98.32	80
A4V3A		4	100	4	24.92	99.68	80
A7A1A		3	100	3	27.33	81.99	60
A7A2A		1	100	1	21.92	21.92	20
G711A		8	100	8	30.83	246.64	160
G712A		4	100	4	31.25	125.00	80
G713A		4	100	4	31.17	124.68	80
G714A		4	50 LGS	2	30.42	60.84	40
G715A		4	50 LGS	2	33.33	66.66	40
G716A		4	50 LGS	2	33.17	66.34	40
A4VOA	MAR	1	100	1	24.75	24.75	20
A4V1A		3	100	3	24.58	73.74	60
A4V3A		5	100	5	24.92	124.60	100
A7A1A		3	100	3	23.67	71.01	60
A7A2A		1	100	1	23.67	23.67	20
G700B		8	100	8	30.83	246.64	160
G702B		4	100	4	31.25	125.00	80
G703B		5	100	5	31.17	155.85	100
G704B		5	50 LGS	2.5	30.42	76.05	50
G705B		4	50 LGS	2	33.33	66.66	40
G706B		5	50 LGS	2.5	33.17	82.93	50
				S =	95.5	Q = 2836.55	L = 1910

$$A = 2836.55 / 95.5 = 29.70$$

$$T = 13954 \text{ for the second quarter (Appendix B)}$$

$$P = 2836.55 / 13954 = .203$$

April - June 1986 (3rd Quarter)

A4V1A APR	5	100	5	24.58	122.90	100
A4V3A	4	100	4	24.92	99.68	80
A7A1A	3	100	3	23.67	71.01	60
A7A2A	1	100	1	23.67	23.67	20
G711A	8	100	8	30.83	246.64	160
G712A	5	100	5	31.25	156.25	100
G713A	4	100	4	31.17	124.68	80
G714A	4	50 LGS	2	30.42	60.84	40
G715A	5	50 LGS	2.5	33.33	83.33	50
G716A	4	50 LGS	2	33.17	66.34	40
A4VOA MAY	1	100	1	24.58	24.58	20
A4V1A	1	100	1	24.67	24.67	20
A4V2A	1	100	1	24.58	24.58	20
A4V3A	5	100	5	24.92	124.60	100
A4V4A	1	100	1	24.57	24.67	20
A7A1A	3	100	3	23.67	71.01	60
A7A2A	1	100	1	23.67	23.67	20
G700A	9	100	9	30.83	277.47	180
G701A	1	100	1	30.58	30.58	20
G702A	4	100	4	31.25	125.00	80
G703B	2	100	2	30.92	61.84	40
G704A	4	50 LGS	2	30.42	60.84	40
G705A	4	50 LGS	2	33.33	66.66	40
G706A	5	50 LGS	2.5	33.17	82.93	50
G707A	2	100	2	31.17	62.34	40
A7A1A JUN	4	100	4	23.58	94.32	80
A7A2A	1	100	1	23.58	23.58	20
G700A	7	100	7	30.42	212.94	140
G702A	4	100	4	29.45	117.80	80
G703A	4	100	4	31.00	124.00	80
G704A	5	50 LGS	2.5	30.67	76.68	50
G705A	4	50 LGS	2	33.58	67.16	40
G706A	4	50 LGS	2	33.42	66.84	40
G707A	1	100	1	26.83	26.83	20
G708A	1	100	1	31.00	31.00	20

$$S = \frac{14055}{102.5}$$

$$Q = \frac{2981.93}{102.5}$$

$$L = \frac{2050}{102.5}$$

$$A = 2981.93 / 102.5 = 29.09$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 2981.93 / 14055 = .212$$

July - September 1986 (4th Quarter)

A7A1A	JUL	3	100	3	23.42	70.26	60
A7A2A		1	100	1	23.42	23.43	20
G710A		4	100	4	30.75	123.00	80
G711A		5	100	5	30.83	154.15	100
G712B		5	100	5	31.58	157.90	100
G713B		4	100	4	31.00	124.00	80
G714A		4	50 LGS	2	30.42	60.84	40
G715A		5	50 LGS	2.5	33.33	83.33	50
G716A		4	50 LGS	2	33.17	66.34	40
A4V3A	AUG	4	100	4	25.58	102.32	80
A4V4A		1	100	1	25.75	25.75	20
A7A1A		4	50 LGS	2	24.33	48.66	40
A7A2A		1	50 LGS	0.5	24.33	12.17	10
G710A		5	100	5	30.75	153.75	100
G711A		4	100	4	30.50	122.00	80
G712D		4	100	4	31.58	126.32	80
G713A		5	100	5	31.08	155.40	100
G714A		4	50 LGS	2	30.58	61.16	40
G715A		4	50 LGS	2	33.50	67.00	40
G716A		5	50 LGS	2.5	33.33	83.33	50
A4V3A	SEP	4	100	4	25.50	102.00	80
A7A1A		3	50 LGS	1.5	24.33	36.50	30
A7A2A		1	50 LGS	0.5	24.33	12.17	10
G711A		8	100	8	30.50	244.00	160
G712B		5	100	5	31.83	159.15	100
G713A		4	100	4	31.08	124.32	80
G714A		5	50 LGS	2.5	30.58	76.45	50
G715A		4	50 LGS	2	33.50	67.00	40
G716A		4	50 LGS	2	33.33	66.66	40
				S =	90	L = 2709.35	L = 1800

$$A = 2709.35 / 90 = 30.10$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 2709.35 / 12470 = .217$$

WRI - N/C  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct N/C	Msns for N/C	Msn Flight Time	Fly Hours N/C	Actual Capability Tons
A769A OCT	4	50 LGS	2	16.42	32.84	40
A7H5A	4	100	4	12.50	50.00	80
A7H6A	5	100	5	13.75	68.75	100
A7H7A	4	100	4	13.75	55.00	80
G7H5A	3	100	3	14.50	43.50	60
G7H5A	1	100	1	14.50	14.50	20
G7H6A	5	100	5	14.25	71.25	100
G7K7A	2	50 LGS	1	17.67	17.67	20
A769A NOV	4	50 LGS	2	16.42	32.84	40
A7H5A	5	100	5	12.50	62.50	100
A7H6A	4	100	4	13.75	55.00	80
A7H7A	5	100	5	13.75	68.75	100
G7H5A	4	100	4	14.75	59.00	80
G7H6A	3	100	3	15.17	45.51	60
G7K7A	3	50 LGS	1.5	17.67	26.51	30
A769A DEC	5	50 LGS	2.5	16.42	41.05	50
A7H5A	4	100	4	12.50	50.00	80
A7H6A	4	100	4	13.75	55.00	80
A7H7A	4	100	4	13.75	55.00	80
G7H5A	5	100	5	14.50	72.50	100
G7H6A	4	100	4	14.83	59.32	80
G7K7A	2	50 LGS	1	17.67	17.67	20
			$S = 74$		$Q = 1054.16$	$L = 1480$

A = 1054.16 / 74 = 14.25  
T = 13794 for the first quarter (Appendix B)  
P = 1054.16 / 13794 = .076

January - March 1986 (2nd Quarter)

A769A JAN	4	50 LGS	2	16.42	32.84	40
A7H6A	4	100	4	13.75	55.00	80
A7H7A	5	100	5	13.75	68.75	100
G7H5A	4	100	4	14.58	58.32	80
G7H6A	5	100	5	14.92	74.60	100
G7K7A	2	50 LGS	1	17.67	17.67	20
A769A FEB	4	50 LGS	2	16.42	32.84	40
A7H5A	4	100	4	12.50	50.00	80
A7H6A	4	100	4	13.75	55.00	80
A7H7A	4	100	4	13.75	55.00	80
G7H5A	3	100	3	14.58	43.74	60
G7H5A	1	100	1	14.58	14.58	20
G7H6A	4	100	4	15.08	60.32	80
G7K7A	2	50 LGS	1	17.67	17.67	20
A769A MAR	5	50 LGS	2.5	16.42	41.05	50
A7H5A	5	100	5	12.50	50.00	100
A7H6A	4	100	4	13.75	55.00	80
A7H7A	4	100	4	13.75	55.00	80
G7H5A	5	100	5	14.58	72.90	100
G7H6A	4	100	4	15.00	60.00	80
G7K7A	3	50 LGS	1.5	17.75	26.63	30
			$S = \frac{70}{}$		$Q = \frac{996.91}{}$	$L = \frac{1400}{}$

$$A = 996.91 / 70 = 14.24$$

$$T = 13954 \text{ for the second quarter (Appendix B)}$$

$$P = 996.91 / 13954 = .071$$

April - June 1986 (3rd Quarter)

A769A APR	4	50 LGS	2	16.42	32.84	40
A7H5A	4	100	4	12.50	50.00	80
A7H6A	4	100	4	13.67	54.68	80
A7H6A	1	100	1	13.67	13.67	20
A7H7A	4	100	4	13.67	54.68	80
G7H5A	4	100	4	14.58	58.32	80
G7H6A	3	100	3	14.92	44.76	60
G7H7A	1	100	1	14.92	14.92	20
G7K7A	2	50 LGS	1	17.75	17.75	20
A769P MAY	4	50 LGS	2	16.42	32.84	40
A7H5A	5	100	5	12.50	62.50	100
A7H6A	4	100	4	13.67	54.68	80
A7H7A	5	100	5	13.67	68.35	100
G7H5A	4	100	4	14.58	58.32	80
G7H6A	5	100	5	15.00	75.00	100
G7K7A	2	50 LGS	1	17.67	17.67	20
A769A JUN	5	50 LGS	2.5	16.42	41.05	50
A7H5A	4	100	4	12.50	50.00	80
A7H6A	4	100	4	13.67	54.68	80
A7H7A	4	100	4	13.67	54.68	80
G7H5A	5	100	5	14.58	72.90	100
G7H6A	4	100	4	14.92	59.68	80
G7K7A	2	50 LGS	1	17.75	17.75	20
			S =	<u>74.5</u>	Q =	<u>1061.72</u>
					L =	<u>1490</u>

$$A = 1061.72 / 74.5 = 14.25$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 1061.72 / 14055 = .076$$

July - September 1986 (4th Quarter)

A7H5A	JUL	4	100	4	12.42	49.68	80
A7H6A		5	100	5	14.25	71.25	100
A7H7A		4	100	4	13.58	54.32	80
G769A		4	100	4	17.00	68.00	80
G7H4A		4	100	4	12.75	51.00	80
G7H6C		4	100	4	13.00	52.00	80
G7K7A		2	50 LGS	1	17.58	17.58	20
A7H5A	AUG	5	100	5	12.42	62.10	100
A7H6A		2	100	2	14.25	28.50	40
A7H6A		2	100	2	14.25	28.50	40
A7H7A		5	100	5	13.58	67.90	100
G769A		4	100	4	16.50	66.00	80
G7H4A		4	100	4	12.75	51.00	80
G7H8A		4	100	4	13.00	52.00	80
G7K7A		3	50 LGS	1.5	17.58	26.37	30
A7H5A	SEP	4	100	4	13.58	54.32	80
A7H6A		2	100	2	14.25	28.50	40
A7H6A		2	100	2	14.25	28.50	40
A7H7A		4	100	4	13.58	54.32	80
G769A		5	100	5	16.50	82.50	100
G7H4A		1	100	1	12.75	12.75	20
G7H4A		4	100	4	12.75	51.00	80
G7H8B		4	100	4	12.92	51.68	80
G7K7A		2	50 LGS	1	17.58	17.58	20
				S =	80.5	Q = 1127.35	L = 1610

$$A = 1127.35 / 80.5 = 14.00$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 1127.35 / 12470 = .090$$

CHS - AFR  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct AFR	Msns for AFR	Msn Flight Time	Fly Hours AFR	Actual Capability Tons
A463A OCT	1	100	1	40.33	40.33	20
A465A	1	100	1	34.33	34.33	20
A464A NOV	1	100	1	42.58	42.58	20
A465A	1	100	1	34.33	34.33	20
A463A DEC	1	100	1	40.08	40.08	20
A465A	2	100	<u>2</u>	34.08	<u>68.16</u>	<u>40</u>
			S = <u>7</u>		Q = <u>259.81</u>	L = <u>140</u>

A = 259.81 / 7 = 37.12  
T = 13794 for the first quarter (Appendix B)  
P = 259.81 / 13794 = .019

January - March (2nd Quarter)

A464A JAN	1	100	1	42.67	42.67	20
A465A	1	100	1	34.42	34.42	20
A463A FEB	1	100	1	40.42	40.42	20
A465A	1	100	1	34.42	34.42	20
A464A MAR	1	100	1	42.67	42.67	20
A465A	1	100	<u>1</u>	34.42	<u>34.42</u>	<u>20</u>
			S = <u>6</u>		Q = <u>229.02</u>	L = <u>120</u>

A = 229.02 / 6 = 38.17  
T = 13954 for the second quarter (Appendix B)  
P = 229.02 / 13954 = .016

April - June 1986 (3rd Quarter)

A463A APR	1	100	1	40.00	40.00	20
A465A	1	100	1	34.00	34.00	20
A464A MAY	1	100	1	42.25	42.25	20
A465A	1	100	1	34.00	34.00	20
A463A JUN	1	100	1	40.00	40.00	20
A465A	1	100	1	34.00	34.00	20
			$S = \frac{1}{6}$		$Q = 224.25$	$L = 120$

$$A = 224.25 / 6 = 37.38$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 224.25 / 14055 = .016$$

July - September (4th Quarter)

A464A JUL	1	100	1	42.08	42.08	20
A465A	1	100	1	33.83	33.83	20
A463A AUG	1	100	1	39.83	39.83	20
A465A	1	100	1	33.83	33.83	20
A464A SEP	1	100	1	42.08	42.08	20
A465A	1	100	1	33.83	33.83	20
			$S = \frac{1}{6}$		$Q = 225.48$	$L = 120$

$$A = 225.48 / 6 = 37.58$$

$$T = 12470 \text{ for the fourth quarter}$$

$$P = 225.48 / 12470 = .018$$

CHS - BDA  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct BDA	Msns for BDA	Msn Flight Time	Fly Hours BDA	Actual Capability Tons
G481A OCT	2	100	2	12.75	25.50	40
G481A NOV	2	100	2	12.58	25.16	40
G481B DEC	2	100	<u>2</u>	12.83	<u>25.66</u>	<u>40</u>
			S = 6		Q = 76.32	L = 120

A = 76.32 / 6 = 12.72  
T = 13794 for the first quarter (Appendix B)  
P = 76.32 / 13794 = .006

January - March 1986 (2nd Quarter)

G481A JAN	3	100	3	12.58	37.74	60
G480A FEB	1	100	1	12.83	12.83	20
G481B	1	100	1	12.83	12.83	20
G481B MAR	1	100	<u>1</u>	12.92	<u>12.92</u>	<u>20</u>
			S = 6		Q = 76.32	L = 120

A = 76.32 / 6 = 12.72  
T = 13954 for the second quarter (Appendix B)  
P = 76.32 / 13954 = .006

April - June 1986 (3rd Quarter)

G481A APR	2	100	2	12.75	25.50	40
G481A MAY	2	100	2	12.83	25.66	40
G481A JUN	2	100	<u>2</u>	12.50	<u>25.00</u>	<u>40</u>
			S = 6		Q = 76.16	L = 120

A = 76.16 / 6 = 12.69  
T = 14055 for the third quarter (Appendix B)  
P = 76.16 / 14055 = .005

July - September 1986 (4th Quarter)

G481A JUL	3	100	3	13.08	39.24	60
G481A AUG	2	100	2	12.50	25.00	40
G481A SEP	2	100	<u>2</u>	12.42	<u>24.84</u>	<u>40</u>
			S = 7		Q = 89.08	L = 140

A = 89.08 / 7 = 12.73  
T = 12470 for the fourth quarter (Appendix B)  
P = 89.08 / 12470 = .007

CHS - C/S  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct C/S	Msns for C/S	Msn Flight Time	Fly Hours C/S	Actual Capability Tons
A477A OCT	5	100	5	9.00	45.00	100
A478A	4	100	4	9.75	39.00	80
G479A	2	100	2	12.75	25.50	40
G488A	1	100	1	29.00	29.00	20
G493A	1	100	1	25.58	25.58	20
G497A	1	100	1	25.50	25.50	20
G791B	1	100	1	31.17	31.17	20
A477A NOV	4	100	4	9.00	36.00	80
A478A	4	100	4	9.75	39.00	80
G479A	3	100	3	12.75	38.25	60
G488A	1	100	1	29.00	29.00	20
G491A	1	100	1	27.67	27.67	20
G497A	1	100	1	25.83	25.83	20
G793A	1	100	1	29.08	29.08	20
A476A DEC	4	100	4	10.75	43.00	80
A478A	5	100	5	9.75	48.75	100
G479A	2	100	2	12.75	25.50	40
G488A	1	100	1	29.00	29.00	20
G491B	1	100	1	27.67	27.67	20
G493A	1	100	1	25.58	25.58	20
			<u>S = 44</u>		<u>Q = 645.08</u>	<u>L = 880</u>

A = 645.08 / 44 = 14.66

T = 13794 for the first quarter (Appendix B)

P = 645.08 / 13794 = .047

January - March 1986 (2nd Quarter)

A477A JAN	5	100	5	10.75	53.75	100
A478A	4	100	4	9.75	39.00	80
G479A	2	100	2	12.83	25.66	40
G491B	1	100	1	27.67	27.67	20
G493A	1	100	1	25.58	25.58	20
G497A	1	100	1	25.83	25.83	20
G789A	1	100	1	32.50	32.50	20
A476A FEB	1	100	1	10.75	10.75	20
A477A	3	100	3	10.75	32.25	60
A478A	3	100	3	9.75	29.25	60
A479A	1	100	1	9.75	9.75	20
G479A	2	100	2	12.83	25.66	40
G488A	1	100	1	29.00	29.00	20
G493A	1	100	1	25.58	25.58	20
G497A	1	100	1	25.83	25.83	20
G791B	1	100	1	31.17	31.17	20
G477A MAR	4	100	4	10.75	43.00	80
G478A	5	100	5	10.00	50.00	100
G479A	2	100	2	12.83	25.66	40
G488B	1	100	1	29.00	29.00	20
G491B	1	100	1	27.67	27.67	20
B497B	1	100	1	25.83	25.83	20
			$S = \frac{1}{43}$		$Q = \frac{650.39}{}$	$L = \frac{860}{}$

$$A = 650.39 / 43 = 15.13$$

$$T = 13954 \text{ for the second quarter (Appendix B)}$$

$$P = 650.39 / 13954 = .047$$

April - June 1986 (3rd Quarter)

G470A	APR	1	100	1	12.67	12.67	20
G475B		3	100	3	10.00	30.00	60
G476A		3	100	3	10.75	32.25	60
G477A		1	100	1	10.75	10.75	20
G478B		1	100	1	10.00	10.00	20
G479A		1	100	1	12.67	12.67	20
G488A		1	100	1	29.00	29.00	20
G491A		1	100	1	27.67	27.67	20
G493A		1	100	1	25.58	25.58	20
G494A		1	100	1	25.58	25.58	20
G797A		1	100	1	29.33	29.33	20
G477A	MAY	5	100	5	10.75	53.75	100
G478B		4	100	4	9.75	39.00	80
G479A		3	100	3	12.67	38.01	60
G491B		1	100	1	28.25	28.25	20
G493A		1	100	1	25.58	25.58	20
G497A		1	100	1	25.83	25.83	20
G789B		1	100	1	32.50	32.50	20
G477A	JUN	4	100	4	10.75	43.00	80
G478B		5	100	5	9.75	48.75	100
G479A		2	100	2	12.67	25.34	40
G488A		1	100	1	29.00	29.00	20
G493A		1	100	1	25.58	25.58	20
G497A		1	100	1	25.83	25.83	20
G791A		1	100	1	31.75	31.75	20
				$S = \frac{1}{46}$	$Q = \frac{717.67}{46}$	$L = \frac{920}{46}$	

$$A = 717.67 / 46 = 15.60$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 717.67 / 14055 = .051$$

July - September 1986 (4th Quarter)

G475A	JUL	4	100	4	10.00	40.00	80
G476A		5	100	5	10.75	53.75	100
G479B		2	100	2	12.58	25.16	40
G488A		1	100	1	29.00	29.00	20
G491A		1	100	1	28.25	28.25	20
G497A		1	100	1	25.83	25.83	20
G793A		1	100	1	29.08	29.08	20
G477A	AUG	4	100	4	10.75	43.00	80
G478A		5	100	5	9.75	48.75	100
G479A		2	100	2	12.58	25.16	40
G488A		1	100	1	29.00	29.00	20
G491A		1	100	1	27.67	27.67	20
G493A		1	100	1	25.58	25.58	20
G797A		1	100	1	29.33	29.33	20
A499A	SEP	1	100	1	24.83	24.83	20
G477A		4	100	4	10.75	43.00	80
G478A		4	100	4	9.75	39.00	80
G479A		2	100	2	12.58	25.16	40
G491A		1	100	1	27.67	27.67	20
G493A		1	100	1	25.58	25.58	20
G497A		1	100	1	25.83	25.83	20
G789A		1	100	1	32.50	32.50	20
				S =	<u>45</u>	Q =	<u>703.13</u>
						L =	<u>900</u>

$$A = 703.13 / 45 = 15.63$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 703.13 / 12470 = .056$$

CHS - UK  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct UK	Msns for UK	Msn Flight Time	Fly Hours UK	Actual Capability Tons
A4M1A OCT	14	100	14	18.83	263.32	280
A4M3A	3	100	3	17.67	53.01	60
A4M3A	1	100	1	17.67	17.67	20
A4M1A NOV	13	100	13	18.83	244.79	260
A4M1A	1	100	1	18.83	18.83	20
A4M3A	4	100	4	18.08	72.32	80
N4P1P	3	100	3	18.83	56.49	60
A4M1P DEC	11	100	11	18.83	207.13	220
A4M2P	3	100	3	18.83	56.49	60
A4M3A	3	100	3	18.08	54.24	60
N4P1P	2	100	2	18.83	37.66	40
			S = 58		Q = 1082.25	L = 1160

A = 1082.25 / 58 = 18.66  
T = 13794 for the first quarter (Appendix B)  
P = 1082.25 / 13794 = .078

January - March 1986 (2nd Quarter)

A4M1A JAN	11	100	11	18.83	207.13	220
A4M1A	2	100	2	18.83	37.66	40
A4M3A	4	100	4	18.08	72.32	80
N4P1Q	4	100	4	18.83	75.32	80
A4M1P FEB	3	100	3	18.83	56.49	60
A4M1P	10	100	10	18.83	188.30	200
A4M3A	4	100	4	18.08	72.32	80
N4P1P	2	100	2	18.83	37.66	40
A4M1A MAR	8	100	8	18.83	150.64	160
A4M1A	2	100	2	18.83	37.66	40
A4M2P	4	100	4	21.08	84.32	80
A4M3A	5	100	5	17.58	87.90	100
N4POP	1	100	1	21.00	21.08	20
N4P1P	2	100	2	18.83	37.66	40
			S = 62		Q = 1166.46	L = 1240

A = 1166.46 / 62 = 18.81  
T = 13954 for the second quarter (Appendix B)  
P = 1166.46 / 13954 = .084

April - June 1986 (3rd Quarter)

A4MOB APR	1	100	1	21.08	21.08	20
A4M1P	8	100	8	18.83	150.64	160
A4M1P	2	100	2	18.83	37.66	40
A4M2P	2	100	2	21.08	42.16	40
A4M3B	4	100	4	18.25	73.00	80
N4POP	1	100	1	21.08	21.08	20
N4P1P	1	100	1	18.83	18.83	20
A4MOP MAY	1	100	1	20.67	20.67	20
A4M1P	2	100	2	18.83	37.66	40
A4M1P	6	100	6	18.83	112.98	120
A4M2A	2	100	2	21.08	42.16	40
A4M3A	2	100	2	18.25	36.50	40
A4M4A	1	100	1	20.67	20.67	20
N4P1P	3	100	3	18.83	56.49	60
N4P2A	1	100	1	20.67	20.67	20
N4P3P	1	100	1	18.83	18.83	20
G4M3A	1	100	1	26.25	26.25	20
A4M1A JUN	7	100	7	18.83	131.81	140
A4M1A	3	100	3	18.83	56.49	60
A4M2A	2	100	2	21.08	42.16	40
A4M2A	3	100	3	21.08	63.24	60
A4M3A	5	100	5	18.25	91.25	100
N4P1P	2	100	2	18.83	37.66	40
			<u>S = 61</u>		<u>Q = 1179.94</u>	<u>L = 1220</u>

$$A = 1179.94 / 61 = 19.34$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 1179.94 / 14055 = .084$$

July - September 1986 (4th Quarter)

A4M1P JUL	7	100	7	18.83	131.81	140
A4M1P	3	100	3	18.83	56.49	60
A4M2P	3	100	3	21.08	63.24	60
A4M2P	1	100	1	21.08	21.08	20
A4M3A	4	100	4	18.17	72.68	80
N4P1P	2	100	2	18.83	37.66	40
A4M1P AUG	7	100	7	18.83	131.81	140
A4M1P	1	100	1	18.83	18.83	20
A4M2P	3	100	3	21.08	63.24	60
A4M2P	2	100	2	21.08	42.16	40
A4M3A	5	100	5	18.17	90.85	100
N4P1P	1	100	1	18.83	18.83	20
N4P1P	2	100	2	18.83	37.66	40
A4M1P SEP	9	100	9	18.83	169.47	180
A4M1P	3	100	3	18.83	56.49	60
A4M2P	2	100	2	21.08	42.16	40
A4M3A	4	100	4	18.17	72.68	80
N4POP	1	100	1	21.08	21.08	20
N4POP	1	100	1	21.08	21.08	20
N4P1P	2	100	2	18.83	37.66	40
			S =	63	Q = 1206.96	L = 1260

$$A = 1206.96 / 63 = 19.16$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 1206.96 / 12470 = .097$$

COF - AFR  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct AFR	Msns for AFR	Msn Flight Time	Fly Hours AFR	Actual Capability Tons
G783A OCT	1	100	1	27.75	27.75	20
G483A	8	100	8	25.08	200.64	160
G483A NOV	7	100	7	25.08	175.56	140
G787A	1	100	1	41.00	41.00	20
G483A DEC	8	100	8	25.08	200.64	160
G783A	1	100	<u>1</u>	27.75	<u>27.75</u>	<u>20</u>
			S = 26		Q = 673.34	L = 520

A = 673.34 / 26 = 25.90  
T = 13794 for the first quarter (Appendix B)  
P = 673.34 / 13794 = .049

January - March 1986 (2nd Quarter)

G483A JAN	6	100	6	25.08	150.48	120
G487A	1	100	1	38.33	38.33	20
G783A	1	100	1	27.75	27.75	20
G483A FEB	7	100	7	25.08	175.56	140
G783A	1	100	1	27.75	27.75	20
G483A MAR	8	100	8	25.08	200.64	160
G787A	1	100	<u>1</u>	41.00	<u>41.00</u>	<u>20</u>
			S = 25		Q = 661.57	L = 500

A = 661.57 / 25 = 26.46  
T = 13954 for the second quarter (Appendix B)  
P = 661.57 / 13954 = .047

April - June 1986 (3rd Quarter)

G483A	APR	8	100	8	25.08	200.64	160
G783A		1	100	1	27.75	27.75	20
G483A	MAY	5	100	5	25.08	125.40	100
G487A		1	100	1	38.33	38.33	20
G783A		1	100	1	27.75	27.75	20
G483A	JUN	1	100	1	25.08	25.08	20
G483A		7	100	7	25.08	175.56	140
G783A		1	100	<u>1</u>	27.75	<u>27.75</u>	<u>20</u>
				S = 25		Q = 648.26	L = 500

$$A = 648.26 / 25 = 25.93$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 648.26 / 14055 = .046$$

July - September 1986 (4th Quarter)

G483A	JUL	8	100	8	25.08	200.64	160
G787A		1	100	1	41.00	41.00	20
G483A	AUG	7	100	7	25.08	175.56	140
G783A		1	100	1	27.75	27.75	20
G483A	SEP	7	100	7	25.08	175.56	140
G487A		1	100	1	38.33	38.33	20
G783A		1	100	<u>1</u>	27.75	<u>27.75</u>	<u>20</u>
				S = 26		Q = 686.59	L = 520

$$A = 686.59 / 26 = 26.41$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 686.59 / 12470 = .055$$

NGU - AFR  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct AFR	Msns for AFR	Msn Flight Time	Fly Hours AFR	Actual Capability Tons
A7POA OCT	1	50 MED	0.5	51.58	25.79	10
A7P3A	1	50 MED	0.5	50.17	25.08	10
A7P4A	1	50 MED	0.5	51.42	25.71	10
A7P5A	1	50 MED	0.5	53.42	26.71	10
A7POB NOV	1	50 MED	0.5	51.58	25.79	10
A7P2A	5	50 MED	2.5	50.17	125.43	50
A7P3A	1	50 MED	0.5	50.17	25.08	10
A7P4B	1	50 MED	0.5	51.42	25.71	10
A7P5A	1	50 MED	0.5	53.42	26.71	10
A7P6A	1	50 MED	0.5	50.17	25.08	10
A7POB DEC	1	50 MED	0.5	51.58	25.79	10
A7P2A	9	50 MED	4.5	50.17	225.77	90
A7P3A	1	50 MED	0.5	50.17	25.08	10
A7P4B	1	50 MED	0.5	51.42	25.71	10
A7P5B	1	50 MED	0.5	53.42	26.71	10
			<u>S = 13.5</u>		<u>Q = 686.15</u>	<u>L = 270</u>

A = 686.15 / 13.5 = 50.83  
T = 13794 for the first quarter (Appendix B)  
P = 686.15 / 13794 = .050

January - March 1986 (2nd Quarter)

A4POA JAN	1	50 MED	0.5	51.92	25.96	10
A4P2A	9	50 MED	4.5	50.50	227.25	90
A4P3A	2	50 MED	1.0	50.50	50.50	20
A4P4A	1	50 MED	0.5	51.75	25.88	10
A4P5A	1	50 MED	0.5	53.75	26.88	10
A4POA FEB	1	50 MED	0.5	51.92	25.96	10
A4P2A	8	50 MED	4.0	50.50	202.00	80
A4P3A	1	50 MED	0.5	50.50	25.25	10
A4P4A	1	50 MED	0.5	51.75	25.88	10
A4P5A	1	50 MED	0.5	53.75	26.88	10
A4POA MAR	1	50 MED	0.5	51.92	25.96	10
A4P3A	2	50 MED	1.0	50.50	50.50	20
A4P5A	1	50 MED	0.5	53.75	26.88	10
			<u>S = 15.0</u>		<u>Q = 765.78</u>	<u>L = 300</u>

A = 765.78 / 15 = 51.07  
T = 13954 for the second quarter (Appendix B)  
P = 765.78 / 13954 = .055

April - June 1986 (3rd Quarter)

A4POA APR	1	50 MED	0.5	51.92	25.96	10
A4P3A	2	50 MED	1.0	50.50	50.50	20
A4P5A	1	50 MED	0.5	53.75	26.88	10
A4S3B	1	50 MED	0.5	51.92	25.96	10
G4P5A	5	50 MED	2.5	50.50	126.25	50
A4POA MAY	1	50 MED	0.5	51.92	25.96	10
A4P3A	3	50 MED	1.5	50.50	75.75	30
A4P5A	1	50 MED	0.5	53.75	26.88	10
A4S3A	1	50 MED	0.5	51.92	25.96	10
G4P5B	4	50 MED	2.0	50.50	101.00	40
A4POA JUN	1	50 MED	0.5	51.92	25.96	10
A4P3A	2	50 MED	1.0	50.50	50.50	20
A4P5A	1	50 MED	0.5	53.75	26.88	10
A4S3A	1	50 MED	0.5	51.92	25.96	10
G4P5A	4	50 MED	2.0	50.50	101.00	40
			$S = 14.5$	$Q = 741.40$	$L = 290$	

$$A = 741.40 / 14.5 = 51.13$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 741.40 / 14055 = .053$$

July - September 1986 (4th Quarter)

A4POA JUL	1	50 MED	0.5	51.92	25.96	10
A4P3A	2	50 MED	1.0	50.50	50.50	20
A4P5A	1	50 MED	0.5	54.58	27.29	10
A4S3A	1	50 MED	0.5	52.00	26.00	10
A4POA AUG	1	50 MED	0.5	51.08	25.54	10
A4P3A	3	50 MED	1.5	50.50	75.75	30
A4P5A	1	50 MED	0.5	54.58	27.29	10
A4S3A	1	50 MED	0.5	52.00	26.00	10
A4POA SEP	1	50 MED	0.5	51.92	25.96	10
A4P3A	2	50 MED	1.0	50.50	50.50	20
A4P5A	1	50 MED	0.5	53.75	26.88	10
A4S3A	1	50 MED	0.5	52.00	26.00	10
			$S = 8.0$	$Q = 413.67$	$L = 160$	

$$A = 413.67 / 8 = 51.71$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 413.67 / 12470 = .033$$

NGU - CARIB  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct CARIB	Msns for CARIB	Msn Flight Time	Fly Hours CARIB	Actual Capability Tons
A474A OCT	5	100	5	11.17	55.85	100
A475A	4	100	4	9.33	37.32	80
G773A	2	100	2	12.75	25.50	40
A474A NOV	4	100	4	11.17	44.68	80
A475A	5	100	5	9.33	46.65	100
G773A	2	100	2	12.75	25.50	40
A474A DEC	3	100	3	11.17	33.51	60
A475A	4	100	4	9.33	37.32	80
A475A	1	100	1	9.33	9.33	20
G773A	2	100	2	12.75	25.50	40
			S = 32		Q = 341.16	L = 640

A = 341.16 / 32 = 10.66  
T = 13794 for the first quarter (Appendix B)  
P = 341.16 / 13794 = .025

January - March 1986 (2nd Quarter)

A474A JAN	4	100	4	11.25	45.00	80
A475A	5	100	5	9.33	46.65	100
G773A	2	100	2	12.83	25.66	40
A474A FEB	4	100	4	11.25	45.00	80
A475A	4	100	4	9.33	37.32	80
G773A	2	100	2	12.83	25.66	40
A474A MAR	4	100	4	11.25	45.00	80
A475A	5	100	5	9.33	46.65	100
G773A	2	100	2	12.83	25.66	40
			S = 32		Q = 342.60	L = 640

A = 342.60 / 32 = 10.71  
T = 13954 for the second quarter (Appendix B)  
P = 342.60 / 13954 = .025

April - June 1986 (3rd Quarter)

A474A APR	5	100	5	11.17	55.85	100
A475A	4	100	4	9.25	37.00	80
G773A	2	100	2	12.75	25.50	40
A474A MAY	4	100	4	11.17	44.68	80
A475A	4	100	4	9.33	37.32	80
G773A	2	100	2	12.75	25.50	40
A474A JUN	4	100	4	11.17	44.68	80
A475A	5	100	5	9.25	46.25	100
G773A	2	100	2	12.75	25.50	40
			S = 32		Q = 342.28	L = 640

$$A = 342.28 / 32 = 10.70$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 342.28 / 14055 = .024$$

July - September 1986 (4th Quarter)

A474A JUL	5	100	5	11.00	55.00	100
A475A	4	100	4	9.25	37.00	80
G773A	2	100	2	12.58	25.16	40
A474A AUG	4	100	4	11.00	44.00	80
A475A	5	100	5	9.25	46.25	100
G773A	2	100	2	12.58	25.16	40
A474A SEP	4	100	4	11.00	44.00	80
A475A	4	100	4	9.25	37.00	80
G773A	2	100	2	12.58	25.16	40
			S = 32		Q = 338.73	L = 640

$$A = 338.73 / 32 = 10.59$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 338.73 / 12470 = .027$$

NGU - MED  
October - December 1986 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
A4V7A OCT	4	50 M/E	2.0	35.17	70.34	40
A7POA	1	50 AFR	0.5	51.58	25.79	10
A7P3A	1	50 AFR	0.5	50.17	25.08	10
A7P4A	1	50 AFR	0.5	51.42	25.71	10
A7P5A	1	50 AFR	0.5	53.42	26.71	10
G458A	5	100	5.0	27.67	138.35	100
G459A	13	100	13.0	27.67	359.71	260
A4V7A NOV	4	50 M/E	2.0	35.67	71.34	40
A7POB	1	50 AFR	0.5	51.58	25.79	10
A7P2A	5	50 AFR	2.5	50.17	125.43	50
A7P3A	1	50 AFR	0.5	50.17	25.08	10
A7P4B	1	50 AFR	0.5	51.42	25.71	10
A7P5A	1	50 AFR	0.5	53.42	26.71	10
A7P6A	1	50 AFR	0.5	50.17	25.08	10
G458A	4	100	4.0	27.67	110.68	80
G459A	13	100	13.0	27.67	359.71	260
A4V7A DEC	4	50 M/E	2.0	35.67	71.34	40
A7POB	1	50 AFR	0.5	51.58	25.79	10
A7P2A	9	50 AFR	4.5	50.17	225.77	90
A7P3A	1	50 AFR	0.5	50.17	25.08	10
A7P4B	1	50 AFR	0.5	51.42	25.71	10
A7P5B	1	50 AFR	0.5	53.42	26.71	10
G458B	5	100	5.0	27.67	138.35	100
G4S9C	12	100	12.0	27.67	332.04	240
			$S = \frac{12.0}{71.5}$		$Q = \frac{332.04}{2338.01}$	$L = \frac{240}{1430}$

A = 2338.01 / 71.5 = 32.70  
T = 13794 for the first quarter (Appendix B)  
P = 2338.01 / 13794 = .170

January - March 1986 (2nd Quarter)

A4POA JAN	1	50 AFR	0.5	51.92	25.96	10
A4P2A	9	50 AFR	4.5	50.50	227.25	90
A4P3A	2	50 AFR	1.0	50.50	50.50	20
A4P4A	1	50 AFR	0.5	51.75	25.88	10
A4P5A	1	50 AFR	0.5	53.75	26.88	10
A4V7A	4	50 M/E	2.0	35.67	71.34	40
G758B	4	100	4.0	27.33	109.32	80
G759A	14	100	14.0	27.25	381.50	280
A4POA FEB	1	50 AFR	0.5	51.92	25.96	10
A4P2A	8	50 AFR	4.0	50.50	202.00	80
A4P3A	1	50 AFR	0.5	50.50	25.25	10
A4P4A	1	50 AFR	0.5	51.75	25.88	10
A4P5A	1	50 AFR	0.5	53.75	26.88	10
A4V7A	4	50 M/E	2.0	35.67	71.34	40
G758B	4	100	4.0	27.25	109.00	80
G759A	12	100	12.0	27.25	327.00	240
A4POA MAR	1	50 AFR	0.5	51.92	25.96	10
A4P3A	2	50 AFR	1.0	50.50	50.50	20
A4P5A	1	50 AFR	0.5	53.75	26.88	10
A4V7A	5	50 M/E	2.5	35.67	89.18	50
G758A	4	100	4.0	27.25	109.00	80
G759A	13	100	13.0	27.25	354.25	260
			S = <u>72.5</u>		Q = <u>2387.71</u>	L = <u>1450</u>

$$A = 2387.71 / 72.5 = 32.93$$

$$T = 13954 \text{ for the second quarter (Appendix B)}$$

$$P = 2387.71 / 13954 = .171$$

April - June 1986 (3rd Quarter)

A451A	APR	4	100	4.0	25.58	102.32	80		
A4POA		1	50 AFR	0.5	51.92	25.96	10		
A4P3A		2	50 AFR	1.0	50.50	50.50	20		
A4P5A		1	50 AFR	0.5	53.75	26.88	10		
A4S3B		1	50 AFR	0.5	51.91	25.96	10		
A4V7A		4	50 M/E	2.0	35.42	70.84	40		
G758A		5	100	5.0	27.00	135.00	100		
G759A		8	100	8.0	27.00	216.00	160		
G759A		4	100	4.0	27.00	108.00	80		
G4P5A		5	50 AFR	2.5	50.50	126.25	50		
A451A	MAY	2	100	2.0	25.58	51.16	40		
A451A		2	100	2.0	25.58	51.16	40		
A4POA		1	50 AFR	0.5	51.92	25.96	10		
A4P3A		3	50 AFR	1.5	50.50	75.75	30		
A4P5A		1	50 AFR	0.5	53.75	26.88	10		
A4S3A		1	50 AFR	0.5	51.92	25.96	10		
A4V7A		4	50 M/E	2.0	35.42	70.84	40		
G4P5B		4	50 AFR	2.0	50.50	101.00	40		
G758B		4	100	4.0	27.25	109.00	80		
G759A		9	100	9.0	27.25	245.25	180		
G759A		5	100	5.0	27.25	136.25	100		
A451A	JUN	5	100	5.0	25.33	126.65	100		
A4POA		1	50 AFR	0.5	51.92	25.96	10		
A4P3A		2	50 AFR	1.0	50.50	50.50	20		
A4P5A		1	50 AFR	0.5	53.75	26.88	10		
A4S3A		1	50 AFR	0.5	51.92	25.96	10		
G458A		1	100	1.0	27.33	27.33	20		
G459A		3	100	3.0	27.33	82.00	60		
G459A		1	100	1.0	27.33	27.33	20		
G4P5A		4	50 AFR	2.0	50.50	101.00	40		
G758A		3	100	3.0	27.00	81.00	60		
G759A		6	100	6.0	27.00	162.00	120		
G759A		3	100	3.0	27.00	81.00	60		
				S =	83.5	Q =	2624.53	L =	1670

$$A = 2624.53 / 83.5 = 31.43$$

$$T = 14055 \text{ for the third quarter (Appendix B)}$$

$$P = 2624.53 / 14055 = .187$$

July - September 1986 (4th Quarter)

A4POA	JUL	1	50 AFR	0.5	51.92	25.96	10		
A4P3A		2	50 AFR	1.0	50.50	50.50	20		
A4P5A		1	50 AFR	0.5	54.58	27.29	10		
A4S3A		1	50 AFR	0.5	52.00	26.00	10		
A4V7A		4	50 M/E	2.0	35.42	70.84	40		
G458A		4	100	4.0	27.50	110.00	80		
G459A		7	100	7.0	27.50	192.50	140		
G459A		3	100	3.0	27.50	82.50	60		
G758A		1	100	1.0	27.17	27.17	20		
G759A		2	100	2.0	27.17	54.34	40		
G759B		1	100	1.0	27.17	27.17	20		
A4POA	AUG	1	50 AFR	0.5	51.08	25.54	10		
A4P3A		3	50 AFR	1.5	50.50	75.75	30		
A4P5A		1	50 AFR	0.5	54.58	27.29	10		
A4S3A		1	50 AFR	0.5	52.00	26.00	10		
A4V7A		4	50 M/E	2.0	35.42	70.84	40		
A458A		2	100	2.0	27.50	55.00	40		
G459A		4	100	4.0	27.50	110.00	80		
G459A		3	100	3.0	27.50	82.50	60		
G758A		2	100	2.0	27.17	54.34	40		
G759A		5	100	5.0	27.17	135.85	100		
G759A		2	100	2.0	27.17	54.34	40		
A4POA	SEP	1	50 AFR	0.5	51.92	25.96	10		
A4P3A		2	50 AFR	1.0	50.50	50.50	20		
A4P5A		1	50 AFR	0.5	53.75	26.88	10		
A4S3A		1	50 AFR	0.5	52.00	26.00	10		
A4V7A		5	50 M/E	2.5	35.17	87.93	50		
G458A		2	100	2.0	27.50	55.00	40		
G459A		3	100	3.0	27.50	82.50	60		
G459A		2	100	2.0	27.50	55.00	40		
G758A		3	100	3.0	27.17	81.51	60		
G759A		5	100	5.0	27.17	135.85	100		
G759A		2	100	2.0	27.17	54.34	40		
				S =	<u>67.5</u>	Q =	<u>2093.19</u>	L =	<u>1350</u>

$$A = 2093.19 / 67.5 = 31.01$$

$$T = 12470 \text{ for the fourth quarter (Appendix B)}$$

$$P = 2093.19 / 12470 = .168$$

NGU - M/E  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct M/E	Msns for M/E	Msn Flight Time	Fly Hours M/E	Actual Capability Tons
A4V7A OCT	4	50 MED	2	35.17	70.34	40
A4V7A NOV	4	50 MED	2	35.67	71.34	40
A4V7A DEC	4	50 MED	2	35.67	71.34	40
			$S = \frac{6}{}$		$Q = \frac{213.02}{}$	$L = \frac{120}{}$

A =  $213.02 / 6 = 35.50$   
T = 13794 for the first quarter (Appendix B)  
P =  $213.02 / 13794 = .015$

January - March 1986 (2nd Quarter)

A4V7A JAN	4	50 MED	2	35.67	71.34	40
A4V7A FEB	4	50 MED	2	35.67	71.34	40
A4V7A MAR	5	50 MED	2.5	35.67	89.18	50
			$S = \frac{6.5}{}$		$Q = \frac{231.86}{}$	$L = \frac{130}{}$

A =  $231.86 / 6.5 = 35.67$   
T = 13954 for the second quarter (Appendix B)  
P =  $231.86 / 13954 = .017$

April - June 1986 (3rd Quarter)

A4V7A APR	4	50 MED	2	35.42	70.84	40
A4V7A MAY	4	50 MED	2	35.42	70.84	40
			$S = \frac{4}{}$		$Q = \frac{141.68}{}$	$L = \frac{80}{}$

A =  $141.68 / 4 = 35.42$   
T = 14055 for the third quarter (Appendix B)  
P =  $141.68 / 14055 = .010$

July - September 1986 (4th Quarter)

A4V7A JUL	4	50 MED	2	35.42	70.84	40
A4V7A AUG	4	50 MED	2	35.42	70.84	40
A4V7A SEP	5	50 MED	2.5	35.17	87.93	50
			$S = \frac{6.5}{}$		$Q = \frac{229.61}{}$	$L = \frac{130}{}$

A =  $229.61 / 6.5 = 35.32$   
T = 12470 for the fourth quarter (Appendix B)  
P =  $229.61 / 12470 = .019$

NGU - N/C  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct N/C	Msns for N/c	Msn Flight Time	Fly Hours N/C	Actual Capability Tons
A7K5A OCT	9	100	9	13.08	117.72	180
A7K5A NOV	9	100	9	13.08	117.72	180
A7K4A DEC	1	100	1	13.08	13.08	20
A7K5A	7	100	<u>7</u>	13.08	<u>91.56</u>	<u>140</u>
			S = 26		Q = 340.08	L = 520

A = 340.08 / 26 = 13.08  
T = 13794 for the first quarter (Appendix B)  
P = 340.08 / 13794 = .025

January - March 1986 (2nd Quarter)

A7K5A JAN	9	100	9	13.25	119.25	180
A7K5A FEB	8	100	8	13.25	106.00	160
A7K5A MAR	8	100	<u>8</u>	13.25	<u>106.00</u>	<u>160</u>
			S = 25		Q = 331.25	L = 500

A = 331.25 / 25 = 13.25  
T = 13954 for the second quarter (Appendix B)  
P = 331.25 / 13954 = .024

April - June 1986 (3rd Quarter)

A7K5A APR	9	100	9	13.25	119.25	180
A7K5A MAY	9	100	9	13.25	119.25	180
G7K2A	4	100	4	15.92	63.68	80
A7K5A JUN	8	100	8	13.25	106.00	160
G7K2A	5	100	<u>5</u>	15.92	<u>79.60</u>	<u>100</u>
			S = 35		Q = 487.78	S = 700

A = 487.78 / 35 = 13.94  
T = 14055 for the third quarter (Appendix B)  
P = 487.78 / 14055 = .035

July - September 1986 (4th Quarter)

A7K5A JUL	9	100	9	13.17	118.53	180
A7K5A AUG	9	100	9	13.17	118.53	180
A7K5A SEP	8	100	<u>8</u>	13.17	<u>105.36</u>	<u>160</u>
			S = 26		Q = 342.42	S = 520

A = 342.42 / 26 = 13.17  
T = 12470 for the fourth quarter (Appendix B)  
P = 342.42 / 12470 = .028

Atlantic Region (C-5)

DOV - GER  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct GER	Msns for GER	Msn Flight Time	Fly Hours GER	Actual Capability Tons
A2F1A OCT	4	100	4	17.42	69.68	200
A2F3A	5	100	5	17.42	87.10	250
A2R3A	4	100	4	17.17	68.68	200
A2R5A	5	100	5	17.17	85.85	250
A2F1A NOV	4	100	4	17.17	68.68	200
A2F3A	4	100	4	17.42	69.68	200
A2ROA	1	100	1	17.42	17.42	50
A2R3A	4	100	4	17.17	68.68	200
A2R5A	4	100	4	17.17	68.68	200
A2FOB DEC	1	100	1	17.50	17.50	50
A2F1B	5	100	5	17.50	87.50	250
A2F3B	3	100	3	17.50	52.50	150
A2R3B	4	100	4	17.17	68.68	250
A2R5B	3	100	3	17.17	51.51	150
			S = <u>51</u>		Q = <u>882.14</u>	L = <u>2550</u>

A = 882.14 / 51 = 17.30

T = 3232 for the first quarter (Appendix B)

P = 882.14 / 3232 = .273

January - March 1986 (2nd Quarter)

A2F1B JAN	4	100	4	17.42	69.68	200
A2F3B	5	100	5	17.42	87.10	250
A2R3B	5	100	5	17.17	85.85	250
A2F3A FEB	4	100	4	17.42	69.68	200
A2R3A	4	100	4	17.17	68.68	200
A2R5A	4	100	4	17.17	68.68	200
A2FOA MAR	1	100	1	17.42	17.42	50
A2F1A	5	100	5	17.42	87.10	250
A2F3A	4	100	4	17.42	69.68	200
A2R3A	3	100	3	17.17	51.51	150
A2R5A	4	100	4	17.17	68.68	200
			S = <u>43</u>		Q = <u>744.06</u>	L = <u>2150</u>

A = 744.06 / 43 = 17.30

T = 2935 for the second quarter (Appendix B)

P = 744.06 / 2935 = .254

April - June 1986 (3rd Quarter)

A2F1A	APR	4	100	4	17.42	69.68	200
A2F3A		4	100	4	17.42	69.68	200
A2F5P		4	100	4	17.42	69.68	200
A2R3P		4	100	4	17.17	68.68	200
A2R6A		4	100	4	17.83	71.32	200
A2F1A	MAY	4	100	4	17.42	69.68	200
A2F3A		5	100	5	17.42	87.10	250
A2R5P		5	100	5	17.42	87.10	250
A2R1A		1	100	1	16.83	16.83	50
A2R2A		2	100	2	17.17	34.34	100
A2R3A		1	100	1	17.17	17.17	50
A2R4A		1	100	1	16.83	16.83	50
A2R7A		1	100	1	17.83	17.83	50
A2R7A		2	100	2	17.83	35.66	100
A2F1A	JUN	5	100	5	17.42	87.10	250
A2F3A		4	100	4	17.42	69.68	200
A2F5A		4	100	4	17.42	69.68	200
A2R2A		4	100	4	17.17	68.68	200
A2R3A		4	100	4	17.17	68.68	200
				S =	63	Q = 1095.40	L = 3150

$$A = 1095.40 / 63 = 17.39$$

T = 3179 for the third quarter (Appendix B)

$$P = 1095.40 / 3179 = .345$$

July - September 1986 (4th Quarter)

A2F1A	JUL	4	100	4	17.42	69.68	200
A2F3A		5	100	5	17.42	87.10	250
A2F5A		4	100	4	17.42	69.68	200
A2R2A		4	100	4	17.17	68.68	200
A2R3A		4	100	4	17.17	68.68	200
A2F1A	AUG	4	100	4	17.42	69.68	200
A2F3A		4	100	4	17.42	69.68	200
A2F3A		1	100	1	17.42	17.42	50
A2F5A		5	100	5	17.42	87.10	250
A2R2A		3	100	3	17.17	51.51	150
A2R3A		4	100	4	17.17	68.68	200
A2F1A	SEP	5	100	5	17.42	87.10	250
A2F3A		4	100	4	17.42	69.68	200
A2F5A		4	100	4	17.42	69.68	200
A2F7A		5	100	5	17.42	87.10	250
A2ROA		2	100	2	17.17	34.34	100
A2R2A		3	100	3	17.17	51.51	150
A2R3A		2	100	2	17.17	34.34	100
A2R6A		4	100	4	17.17	68.68	200
				S =	71	Q = 1230.32	L = 3550

$$A = 1230.32 / 71 = 17.33$$

T = 3364 for the fourth quarter (Appendix B)

$$P = 1230.32 / 3364 = .366$$

DOV - MED  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
A2T1A OCT	4	100	4	27.17	108.68	200
A2T3A	5	100	5	27.08	135.40	250
A2T1A NOV	5	100	5	27.25	136.25	250
A2T3A	4	100	4	27.17	108.68	200
A2T1A DEC	4	100	4	27.08	108.32	200
A2T3A	4	100	4	27.17	108.68	200
			S = 26	Q = 706.01		L = 1300

A = 706.01 / 26 = 27.15

T = 3232 for the first quarter (Appendix B)

P = 706.01 / 3232 = .218

January - March 1986 (2nd Quarter)

A2T2B JAN	5	100	5	27.17	135.85	250
A2T3B	4	100	4	27.17	108.68	200
A2T2A FEB	4	100	4	27.17	108.68	200
A2T3A	4	100	4	27.17	108.68	200
A2T1A MAR	1	100	1	27.33	27.33	50
A2T2A	3	100	3	27.17	81.51	150
A2T3A	4	100	4	27.17	108.68	200
			S = 25	Q = 679.41		L = 1250

A = 679.41 / 25 = 27.18

T = 2935 for the second quarter (Appendix B)

P = 679.41 / 2935 = .231

April - June 1986 (3rd Quarter)

A2T2A	APR	4	100	4	27.17	108.68	200
A2T3A		5	100	5	26.92	134.60	250
A2TOA	MAY	2	100	2	26.17	52.34	100
A2T2A		3	100	3	27.17	81.51	150
A2T3A		4	100	4	27.17	108.68	200
A2R6A	JUN	4	100	4	19.08	76.32	200
A2TOA		1	100	1	27.08	27.08	50
A2T1A		3	100	3	26.08	78.24	150
A2T2A		1	100	1	27.17	27.17	50
A2T3A		3	100	3	26.92	80.76	150
				S =	<u>30</u>	Q =	<u>775.38</u>
						L =	<u>1500</u>

$$A = 775.38 / 30 = 25.85$$

$$T = 3179 \text{ for the third quarter (Appendix B)}$$

$$P = 775.38 / 3179 = .244$$

July - September 1986 (4th Quarter)

A2F7A	JUL	3	100	3	19.33	58.00	150
A2R6A		5	100	5	19.08	95.40	250
A2T2A		4	100	4	27.17	108.68	200
A2T3A		5	100	5	27.17	135.85	250
RNF3A		1	100	1	25.75	25.75	50
A2F7A	AUG	4	100	4	19.33	77.32	200
A2R6A		4	100	4	19.17	76.68	200
A2T1A		1	100	1	27.42	27.42	50
A2T2A		4	100	4	27.17	108.68	200
A2T3A		4	100	4	27.17	108.68	200
A2Z7P		1	100	1	29.83	29.83	50
A2T2A	SEP	4	100	4	26.58	106.32	200
A2T3A		5	100	5	26.58	132.90	250
A2Z7P		1	100	1	29.83	29.83	50
RNF3A		1	100	1	25.92	25.92	50
				S =	<u>47</u>	Q =	<u>1147.26</u>
						L =	<u>2350</u>

$$A = 1147.26 / 47 = 24.41$$

$$T = 3364 \text{ for the fourth quarter (Appendix B)}$$

$$P = 1147.26 / 3364 = .341$$

DOV - M/E  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct M/E	Msns for M/E	Msn Flight Time	Fly Hours M/E	Actual Capability Tons
A2W3A OCT	4	100	4	32.00	128.00	200
A2W4A	2	100	2	32.00	64.00	100
A2W5A	2	100	2	32.00	64.00	100
G2W5A	5	100	5	32.25	161.25	250
A2W3P NOV	5	100	5	32.00	160.00	250
A2W4P	5	100	5	32.00	160.00	250
G2W5A	3	100	3	31.83	95.49	150
A2W5A	1	100	1	31.83	31.83	50
A2W3P DEC	4	100	4	32.08	128.32	200
A2W4P	2	100	2	32.17	64.34	100
A2W5A	2	100	2	32.17	64.34	100
G2W5A	3	100	3	31.83	95.49	150
			S = 38		Q = 1217.06	L = 1900

$$A = 1217.06 / 38 = 32.03$$

$$T = 3232 \text{ for the first quarter (Appendix B)}$$

$$P = 1217.06 / 3232 = .377$$

January - March 1986 (2nd Quarter)

A2W3P JAN	5	100	5	31.83	159.15	250
A2W4B	4	100	4	32.17	128.68	200
G2W5B	1	100	1	31.83	31.83	50
G2W5B	4	100	4	31.83	127.32	200
A2W3A FEB	4	100	4	31.83	127.32	200
A2W4P	2	100	2	32.17	64.34	100
A2W5A	2	100	2	32.17	64.34	100
G2W5B	4	100	4	31.83	127.32	200
A2WOP MAR	1	100	1	32.00	32.00	50
A2W3P	3	100	3	31.83	95.49	150
G2W5B	4	100	4	31.83	127.32	200
			S = 34		Q = 1085.11	L = 1700

$$A = 1085.11 / 34 = 31.92$$

$$T = 2935 \text{ for the second quarter (Appendix B)}$$

$$P = 1085.11 / 2935 = .370$$

April - June 1986 (3rd Quarter)

A2W3P APR	3	100	3	31.83	95.49	150
A2Z7P	1	100	1	32.08	32.08	50
G2W5B	5	100	5	32.17	160.85	250
A2W3P MAY	4	100	4	31.83	127.32	200
A2Z7P	1	100	1	32.08	32.08	50
G2W5B	2	100	2	32.17	64.34	100
G2W6A	2	100	2	32.17	64.34	100
A2Z7P JUN	1	100	1	32.08	32.08	50
G2W5B	4	100	4	32.17	128.68	200
			$S = \underline{23}$		$Q = \underline{737.26}$	$L = \underline{1150}$

$$A = 737.26 / 23 = 32.05$$

$$T = 3179 \text{ for the third quarter (Appendix B)}$$

$$P = 737.26 / 3179 = .232$$

July - September 1986 (4th Quarter)

G2W5A JUL	5	100	5	32.17	160.85	250
G2W5B AUG	4	100	4	32.17	128.68	200
G2W5A SEP	4	100	4	32.17	128.68	200
			$S = \underline{13}$		$Q = \underline{418.21}$	$L = \underline{650}$

$$A = 418.21 / 13 = 32.17$$

$$T = 3364 \text{ for the fourth quarter (Appendix B)}$$

$$P = 418.21 / 3364 = .124$$

NGU - MED  
October - December 1985 (1st Quarter)

Cargo Route	Num of Msns	Cargo Pct MED	Msns for MED	Msn Flight Time	Fly Hours MED	Actual Capability Tons
A2V7A OCT	5	100	5	32.83	164.15	250
A2V7A NOV	4	100	4	32.83	131.32	200
G2V7C DEC	4	100	4	32.83	<u>131.32</u>	<u>200</u>
			S = <u>13</u>		Q = <u>426.79</u>	L = <u>650</u>

A = 426.79 / 13 = 32.83  
T = 3232 for the first quarter (Appendix B)  
P = 426.79 / 3232 = .132

January - March 1986 (2nd Quarter)

G2V7B JAN	5	100	5	32.83	164.15	250
G2V7B FEB	4	100	4	32.83	131.32	200
G2V7B MAR	4	100	4	32.83	<u>131.32</u>	<u>200</u>
			S = <u>13</u>		Q = <u>426.79</u>	L = <u>650</u>

A = 426.79 / 13 = 32.83  
T = 2935 for the second quarter (Appendix B)  
P = 426.79 / 2935 = .145

April - June 1986 (3rd Quarter)

G2V7A APR	4	100	4	32.83	131.32	200
G2V7A MAY	5	100	5	32.75	163.75	250
RN51A	1	100	1	29.33	29.33	50
G2V7A JUN	4	100	4	32.08	128.32	200
RN51A	1	100	1	29.33	<u>29.33</u>	<u>50</u>
			S = <u>15</u>		Q = <u>482.05</u>	L = <u>750</u>

A = 482.05 / 15 = 32.14  
T = 3179 for the third quarter (Appendix B)  
P = 482.05 / 3179 = .152

July - September 1986 (4th Quarter)

G2V7A JUL	5	100	5	32.50	162.50	250
RN61A	1	100	1	21.75	21.75	50
G2V7A AUG	4	100	4	31.75	127.00	200
G2V7B SEP	4	100	4	31.75	<u>127.00</u>	<u>200</u>
			S = <u>14</u>		Q = <u>438.25</u>	L = <u>700</u>

A = 438.25 / 14 = 31.30  
T = 3364 for the fourth quarter (Appendix B)  
P = 438.25 / 3364 = .130

CHS - C/S  
April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct C/S	Msns for C/S	Msn Flight Time	Fly Hours C/S	Actual Capability Tons
RN77A MAY	3	100	3	12.33	37.00	150
RN77A JUN	2	100	<u>2</u>	12.33	<u>24.66</u>	<u>100</u>
			L = 5		Q = 61.66	L = 250

A = 61.66 / 5 = 12.33  
T = 3179 for the third quarter (Appendix B)  
P = 61.66 / 3179 = .019

July - September 1986 (4th Quarter)

RN77A JUL	1	100	1	14.25	14.25	50
RN78A	1	100	1	22.92	22.92	50
RN77A AUG	3	100	3	15.42	46.26	150
RN78A	1	100	1	23.42	23.42	50
RN78A SEP	1	100	<u>1</u>	22.92	<u>22.92</u>	<u>50</u>
			S = 7		Q = 129.77	L = 350

A = 129.77 / 7 = 18.54  
T = 3364 for the fourth quarter (Appendix B)  
P = 129.77 / 3364 = .039

COF - AFR  
 April - June 1986 (3rd Quarter)

Cargo Route	Num of Msns	Cargo Pct AFR	Msns for AFR	Msn Flight Time	Fly Hours AFR	Actual Capability Tons
A283A MAY	1	100	$S = \frac{1}{1}$	27.00	$Q = \frac{27.00}{27.00}$	$L = \frac{50}{50}$

A = 27.00 / 1 = 27.00  
 T = 3179 for the third quarter. (Appendix B)  
 P = 27.00 / 3179 = .008

Appendix D: FY 86 MAI Airlift Capability in Tons

Pacific Region (22 AF)  
January - March 1986 (Second Quarter)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	15312	- 1041	= 14271	x .061	= 870.53	/ 16.84	= 52	936
NPAC	15312	- 1041	= 14271	x .147	= 2097.84	/ 34.94	= 60	1080
SBD								
CPAC	15312	- 1041	= 14271	x .044	= 627.92	/ 48.07	= 13	234
SPAC	15312	- 1041	= 14271	x .044	= 627.92	/ 48.07	= 13	234
SUU								
CPAC	15312	- 1041	= 14271	x .704	= 10046.78	/ 44.24	= 227	4086
NPAC	15312	- 1041	= 14271	x 0	= 0	/ 0	= 0	0
TOTAL CAPABILITY								6570

C-5

SUU								
CPAC	2644	- 0	= 2644	x .461	= 1218.88	/ 29.37	= 42	1890
NPAC	2644	- 0	= 2644	x .105	= 277.62	/ 26.49	= 11	495
TOTAL CAPABILITY								2385

1. From Table 4.2.
2. Based on 6.8% of scheduled channel hours (Table 4.2). There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

Pacific Region (22 AF)  
April - June 1986 (Third Quarter)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	17734	- 1100	= 16634	x .052	= 864.97	/ 15.84	= 55	990
NPAC	17734	- 1100	= 16634	x .133	= 2212.32	/ 32.96	= 67	1206
SBD								
CPAC	17734	- 1100	= 16634	x .039	= 648.73	/ 50.20	= 13	234
SPAC	17734	- 1100	= 16634	x .039	= 648.73	/ 50.20	= 13	234
SUU								
CPAC	17734	- 1100	= 16634	x .701	= 11660.43	/ 43.22	= 270	4860
NPAC	17734	- 1100	= 16634	x .007	= 116.44	/ 29.21	= 4	<u>72</u>
TOTAL CAPABILITY								7596

C-5

SUU								
CPAC	2488	- 0	= 2488	x .648	= 1612.22	/ 27.35	= 59	2655
NPAC	2488	- 0	= 2488	x .101	= 251.29	/ 27.94	= 9	<u>405</u>
TOTAL CAPABILITY								3060

1. From Table 4.2.
2. Based on 6.2% of scheduled channel hours (Table 4.2). There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

Pacific Region (22 AF)  
July - September 1986 (Fourth Quarter)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	17726	- 1134 =	16592	x .062 =	1028.70 /	15.80 =	65	1170
NPAC	17726	- 1134 =	16592	x .138 =	2289.70 /	37.08 =	62	1116
SBD								
CPAC	17726	- 1134 =	16592	x .040 =	663.68 /	50.58 =	13	234
SPAC	17726	- 1134 =	16592	x .040 =	663.68 /	50.58 =	13	234
SUU								
CPAC	17726	- 1134 =	16592	x .642 =	10652.06 /	41.84 =	255	4590
NPAC	17726	- 1134 =	16592	x .020 =	331.84 /	28.65 =	12	<u>216</u>
							TOTAL CAPABILITY	7560

C-5

SUU								
CPAC	2947	- 0 =	2947	x .595 =	1753.47 /	29.44 =	60	2700
NPAC	2947	- 0 =	2947	x .134 =	394.90 /	29.33 =	13	<u>585</u>
							TOTAL CAPABILITY	3285

1. From Table 4.2.
2. Based on 6.4% of scheduled channel hours (Table 4.2). There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

Atlantic Region (21 AF)  
January - March 1986 (Second Quarter)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	14205 -	256 =	13949	x .053 =	739.30 /	30.35 =	24	480
MED	14205 -	256 =	13949	x .074 =	1032.23 /	30.47 =	34	680
M/E	14205 -	256 =	13949	x .014 =	195.29 /	31.21 =	6	120
WRI								
LGS	14205 -	256 =	13949	x .093 =	1297.26 /	23.88 =	54	1080
MED	14205 -	256 =	13949	x .203 =	2831.65 /	29.70 =	95	1900
N/C	14205 -	256 =	13949	x .071 =	990.38 /	14.24 =	70	1400
CHS								
AFR	14205 -	256 =	13949	x .016 =	223.18 /	38.17 =	6	120
BDA	14205 -	256 =	13949	x .006 =	83.69 /	12.72 =	7	140
C/S	14205 -	256 =	13949	x .047 =	655.60 /	15.13 =	43	860
UK	14205 -	256 =	13949	x .084 =	1171.72 /	18.81 =	62	1240
COF								
AFR	14205 -	256 =	13949	x .047 =	655.60 /	26.46 =	25	500
NGU								
AFR	14205 -	256 =	13949	x .055 =	767.20 /	51.07 =	15	300
CARIB	14205 -	256 =	13949	x .025 =	348.73 /	10.71 =	33	660
MED	14205 -	256 =	13949	x .171 =	2385.28 /	32.93 =	72	1440
M/E	14205 -	256 =	13949	x .017 =	237.13 /	35.67 =	7	140
N/C	14205 -	256 =	13949	x .024 =	334.78 /	13.25 =	25	500
TOTAL CAPABILITY								11560

1. From Table 4.2.
2. Based on 1.8% of scheduled channel hours (Table 4.2).
3. From Table 4.4 or Appendix C.
4. Based on 20 tons for 21 AF C-141 sorties.

Atlantic Region (21 AF)  
January - March 1986 (Second Quarter)

C-5

MAI	Sched Chan1 Hours1	Sched Intra Hours2	Sched Inter Hours	MAI Portion3	MAI Fly Hours	Avg Msn Lngh3	Num of Msns	MAI Air Cap4
DOV								
GER	2935 -	0 =	2935	x .254 =	745.49 /	17.30 =	43	2150
MED	2935 -	0 =	2935	x .231 =	677.99 /	27.18 =	25	1250
M/E	2935 -	0 =	2935	x .370 =	1085.95 /	31.92 =	34	1700
NGU								
MED	2935 -	0 =	2935	x .145 =	425.58 /	32.83 =	13	650
CHS								
C/S	2935 -	0 =	2935	x 0 =	0 /	0 =	0	0
COF								
AFR	2935 -	0 =	2935	x 0 =	0 /	0 =	0	0
TIK								
GER <sup>5</sup>	2644 -	0 =	2935	x .434 =	1147.50 /	30.20 =	38	<u>1710</u>
TOTAL CAPABILITY								7460

1. From Table 4.2.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
April - June 1986 (Third Quarter)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msn	MAI Air Cap <sup>4</sup>
<b>DOV</b>								
GER	14271	- 214	= 14057	x .044	= 618.51	/ 32.03	= 19	380
MED	14271	- 214	= 14057	x .049	= 688.79	/ 31.43	= 22	440
MED <sup>5</sup>	17734	- 1100	= 16634	x .002	= 33.27	/ 39.42	= 1	18
MED <sup>6</sup>	17734	- 1100	= 16634	x .003	= 49.90	/ 39.42	= 1	18
MED <sup>7</sup>	17734	- 1100	= 16634	x .005	= 83.17	/ 37.67	= 2	36
M/E	14271	- 214	= 14057	x .014	= 196.80	/ 30.17	= 7	140
M/E <sup>5</sup>	17734	- 1100	= 16634	x .003	= 49.90	/ 44.92	= 1	18
M/E <sup>6</sup>	17734	- 1100	= 16634	x .003	= 49.90	/ 44.00	= 1	18
M/E <sup>7</sup>	17734	- 1100	= 16634	x .005	= 83.17	/ 44.42	= 2	36
<b>WRI</b>								
LGS	14271	- 214	= 14057	x .094	= 1321.36	/ 23.91	= 55	1100
MED	14271	- 214	= 14057	x .212	= 2980.08	/ 29.09	= 102	2040
MED <sup>5</sup>	17734	- 1100	= 16634	x .002	= 33.27	/ 33.83	= 1	18
MED <sup>6</sup>	17734	- 1100	= 16634	x .004	= 66.54	/ 33.83	= 2	36
MED <sup>7</sup>	17734	- 1100	= 16634	x .002	= 33.27	/ 33.83	= 1	18
N/C	14271	- 214	= 14057	x .076	= 1068.33	/ 14.25	= 75	1500
<b>CHS</b>								
AFR	14271	- 214	= 14057	x .016	= 224.91	/ 37.38	= 6	120
BDA	14271	- 214	= 14057	x .005	= 70.29	/ 12.69	= 6	120
C/S	14271	- 214	= 14057	x .051	= 716.91	/ 15.60	= 46	920
UK	14271	- 214	= 14057	x .084	= 1180.79	/ 19.34	= 61	1220
<b>COF</b>								
AFR	14271	- 214	= 14057	x .046	= 646.62	/ 25.93	= 25	500
<b>NGU</b>								
AFR	14271	- 214	= 14057	x .053	= 745.02	/ 51.13	= 15	300
CARIB	14271	- 214	= 14057	x .024	= 337.37	/ 10.70	= 32	640
MED	14271	- 214	= 14057	x .187	= 2628.66	/ 31.43	= 84	1680
M/E	14271	- 214	= 14057	x .010	= 140.57	/ 35.42	= 4	80
N/C	14271	- 214	= 14057	x .035	= 492.00	/ 13.94	= 35	700
TOTAL CAPABILITY								12096

1. From Table 4.2.
2. Based on 1.5% (21 AF) and 6.2% (22 AF) of scheduled channel hours (Table 4.2).
3. From Table 4.4 or Appendix C.
4. Based on 20 tons (21 AF) and 18 tons (22 AF) for C-141 sorties.
5. This MAI is served by McChord (TCM) from 22 AF.
6. This MAI is served by Norton (SBD) from 22 AF.
7. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
April - June 1986 (Third Quarter)

C-5

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	3179 -	0 =	3179	x .345 =	1096.76 /	17.39 =	63	3150
MED	3179 -	0 =	3179	x .244 =	775.68 /	25.85 =	30	1500
M/E	3179 -	0 =	3179	x .232 =	737.53 /	32.05 =	23	1150
NGU								
MED	3179 -	0 =	3179	x .152 =	483.21 /	32.14 =	15	750
CHS								
C/S	3179 -	0 =	3179	x .019 =	60.40 /	12.33 =	5	250
COF								
AFR	3179 -	0 =	3179	x .008 =	25.43 /	27.00 =	1	50
TIK								
GER <sup>5</sup>	2488 -	0 =	2488	x .251 =	624.49 /	28.34 =	22	<u>990</u>
TOTAL CAPABILITY								7840

1. From Table 4.2.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
July - September 1986 (Fourth Quarter)

C-141

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
<b>DOV</b>								
GER	12726	- 255	= 12471	x .050	= 623.55	/ 32.09	= 19	389
MED	12726	- 255	= 12471	x .011	= 137.18	/ 27.92	= 5	100
MED <sup>5</sup>	17726	- 1134	= 16592	x .007	= 116.14	/ 38.72	= 3	54
MED <sup>6</sup>	17726	- 1134	= 16592	x .004	= 66.37	/ 37.92	= 2	36
MED <sup>7</sup>	17726	- 1134	= 16592	x .005	= 82.96	/ 38.17	= 2	36
M/E	12726	- 255	= 12471	x .016	= 199.54	/ 30.17	= 7	140
M/E <sup>5</sup>	17726	- 1134	= 16592	x .013	= 215.70	/ 44.00	= 5	90
M/E <sup>6</sup>	17726	- 1134	= 16592	x .011	= 182.51	/ 43.88	= 4	72
M/E <sup>7</sup>	17726	- 1134	= 16592	x .010	= 165.92	/ 43.73	= 4	72
<b>WRI</b>								
LGS	12726	- 255	= 12471	x .108	= 1346.87	/ 24.64	= 55	1100
MED	12726	- 255	= 12471	x .217	= 2706.21	/ 30.10	= 90	1800
MED <sup>5</sup>	17726	- 1134	= 16592	x .002	= 33.18	/ 33.83	= 1	18
MED <sup>6</sup>	17726	- 1134	= 16592	x .002	= 33.18	/ 33.83	= 1	18
MED <sup>7</sup>	17726	- 1134	= 16592	x .004	= 66.37	/ 33.83	= 2	36
N/C	12726	- 255	= 12471	x .090	= 1122.39	/ 14.00	= 80	1600
<b>CHS</b>								
AFR	12726	- 255	= 12471	x .018	= 224.48	/ 37.58	= 6	120
BDA	12726	- 255	= 12471	x .007	= 87.30	/ 12.73	= 7	140
C/S	12726	- 255	= 12471	x .056	= 698.38	/ 15.63	= 45	900
UK	12726	- 255	= 12471	x .097	= 1209.69	/ 19.16	= 63	1260
<b>COF</b>								
AFR	12726	- 255	= 12471	x .055	= 685.91	/ 26.41	= 26	520
<b>NGU</b>								
AFR	12726	- 255	= 12471	x .033	= 411.54	/ 51.71	= 8	160
CARIB	12726	- 255	= 12471	x .027	= 336.72	/ 10.59	= 32	640
MED	12726	- 255	= 12471	x .168	= 2095.13	/ 31.01	= 68	1360
M/E	12726	- 255	= 12471	x .019	= 236.95	/ 35.32	= 7	140
N/C	12726	- 255	= 12471	x .028	= 349.19	/ 13.17	= 27	540

TOTAL CAPABILITY

11332

1. From Table 4.2.
2. Based on 2.0% (21 AF) and 6.4% (22 AF) of scheduled channel hours (Table 4.2).
3. From Table 4.4 or Appendix C.
4. Based on 20 tons (21 AF) and 18 tons (22 AF) for C-141 sorties.
5. This MAI is served by McChord (TCM) from 22 AF.
6. This MAI is served by Norton (SBD) from 22 AF.
7. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
July - September 1986 (Fourth Quarter)

C-5

MAI	Sched Chanl Hours <sup>1</sup>	Sched Intra Hours <sup>2</sup>	Sched Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	3364 -	0 =	3364	x .366 =	1231.22 /	17.33 =	71	3550
MED	3364 -	0 =	3364	x .341 =	1147.12 /	24.41 =	47	2350
M/E	3364 -	0 =	3364	x .124 =	417.14 /	32.17 =	13	650
NGU								
MED	3364 -	0 =	3364	x .130 =	437.32 /	31.30 =	14	700
CHS								
C/S	3364 -	0 =	3364	x .039 =	131.20 /	18.54 =	7	350
COF								
AFR	3364 -	0 =	3364	x 0 =	0 /	0 =	0	0
TIK								
GER <sup>5</sup>	2947 -	0 =	2947	x .271 =	798.64 /	30.75 =	26	<u>1170</u>
TOTAL CAPABILITY								8770

1. From Table 4.2.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is served by Travis (SUU) from 22 AF.

Appendix E: Determination of Model Accuracy<sup>1</sup>

Fiscal Year 1986  
Pacific Region (22 AF)

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
Present Methodology <sup>2</sup>	7992/6552	7992/6570	7992/7596	7992/7542
Model <sup>3</sup>	6552/6552	6570/6570	7596/7596	7560/7542

C-5

Present Methodology <sup>2</sup>	4185/2272	4185/2340	4185/3060	4185/3285
Model <sup>3</sup>	2250/2272	2385/2340	3060/3060	3285/3285

Atlantic Region (21 AF)

C-141

Present Methodology <sup>2</sup>	10380 / 11560	10380 / 11560	10380 / 12076	10380 / 11292
Model <sup>4</sup>	11580 / 11560	11560 / 11560	12096 / 12076	11332 / 11292

C-5

Present Methodology <sup>2</sup>	7050/8650	7050/7460	7050/7840	7050/8770
Model <sup>5</sup>	8650/8650	7460/7460	7840/7840	8770/8770

1. Formulas 10 and 9 from Chapter 4 are used to calculate the accuracy of the present methodology and the model.
2. From Tables 4.1 and 4.8.
3. From Table 4.5 or Appendix D, and Table 4.8.
4. From Table 4.6 or Appendix D, and Table 4.8.
5. From Table 4.7 or Appendix D, and Table 4.8.

Fiscal Year 1987<sup>1</sup>  
Pacific Region (22 AF)

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
Present Methodology <sup>2</sup>	7992/6678	7992/6480	7992/6588	7992/6660
Model <sup>3</sup>	6444/6678	6696/6480	6804/6588	6822/6660

C-5

Present Methodology <sup>2</sup>	4185/2070	4185/2160	4185/2430	4185/2295
Model <sup>3</sup>	2070/2070	2385/2160	3330/2430	3015/2295

Atlantic Region (21 AF)

C-141

Present Methodology <sup>2</sup>	10380 / 10940	10380 / 10460	10380 / 10630	10380 / 10980
Model <sup>3</sup>	10800 / 10940	10440 / 10460	10996 / 10630	11576 / 10980

C-5

Present Methodology <sup>2</sup>	7050/7220	7050/6830	7050/7035	7050/6845
Model <sup>3</sup>	7820/7220	7160/6830	7330/7035	7630/6845

1. Formulas 10 and 9 from Chapter 4 are used to calculate the accuracy of the present methodology and the model.
2. From Table 4.1 and Appendix H.
3. From Appendix G and Appendix H.

Appendix F: FY 87 Planned Channel Flying Hours

Pacific Region (22 AF)<sup>1</sup>

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
October	5409			
November	5224			
December	<u>5409</u>			
QUARTERLY HOURS	16042			
January		5409		
February		4856		
March		<u>5409</u>		
QUARTERLY HOURS		15674		
April			5224	
May			5409	
June			<u>5224</u>	
QUARTERLY HOURS			15857	
July				5409
August				5409
September				<u>5224</u>
QUARTERLY HOURS				16042

C-5

October	910			
November	890			
December	<u>910</u>			
QUARTERLY HOURS	2710			
January		910		
February		841		
March		<u>910</u>		
QUARTERLY HOURS		2661		
April			890	
May			910	
June			<u>890</u>	
QUARTERLY HOURS			2690	
July				910
August				910
September				<u>890</u>
QUARTERLY HOURS				2710

1. Obtained from HQ MAC/DOOMA.

Atlantic Region (22 AF)<sup>1</sup>

C-141

	QTR 1	QTR 2	QTR 3	QTR 4
October	4415			
November	4265			
December	<u>4415</u>			
QUARTERLY HOURS	13095			
January		4415		
February		4005		
March		<u>4415</u>		
QUARTERLY HOURS		12835		
April			4265	
May			4415	
June			<u>4265</u>	
QUARTERLY HOURS			12945	
July				4415
August				4415
September				<u>4265</u>
QUARTERLY HOURS				13095

C-5

October	970			
November	970			
December	<u>970</u>			
QUARTERLY HOURS	2910			
January		931		
February		880		
March		<u>970</u>		
QUARTERLY HOURS		2781		
April			970	
May			970	
June			<u>960</u>	
QUARTERLY HOURS			2900	
July				970
August				970
September				<u>960</u>
QUARTERLY HOURS				2900

1. Obtained from HQ MAC/DOOMA.

Appendix G: FY 87 MAI Airlift Capability in Tons

Pacific Region (22 AF)  
October - December 1986 (First Quarter)

C-141

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	16042	- 1219 =	14823	x .057 =	844.91	/ 15.92 =	53	954
NPAC	16042	- 1219 =	14823	x .128 =	1897.34	/ 36.31 =	52	936
SBD								
CPAC	16042	- 1219 =	14823	x .042 =	622.57	/ 48.17 =	13	234
SPAC	16042	- 1219 =	14823	x .042 =	622.57	/ 48.17 =	13	234
SUU								
CPAC	16042	- 1219 =	14823	x .731 =	10835.61	/ 47.65 =	227	4086
NPAC	16042	- 1219 =	14823	x 0 =	0	/ 0 =		<u>0</u>
TOTAL CAPABILITY								6444

C-5

SUU								
CPAC	2710	- 0 =	2710	x .368 =	997.28	/ 29.07 =	34	1530
NPAC	2710	- 0 =	2710	x .117 =	317.07	/ 25.41 =	12	<u>540</u>
TOTAL CAPABILITY								2070

1. From Appendix F.
2. Based on 7.6% (Table 4.2) of planned channel hours. There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

Pacific Region (22 AF)  
January - March 1987 (Second Quarter)

C-141

MAI	Plan Chan1 Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	15674	- 1066 =	14608	x .061 =	891.09 /	16.84 =	53	954
NPAC	15674	- 1066 =	14608	x .147 =	2147.38 /	34.94 =	61	1098
SBD								
CPAC	15674	- 1066 =	14608	x .044 =	642.75 /	48.07 =	13	234
SPAC	15674	- 1066 =	14608	x .044 =	642.75 /	48.07 =	13	234
SUU								
CPAC	15674	- 1066 =	14608	x .704 =	10284.03 /	44.24 =	232	4176
NPAC	15674	- 1066 =	14608	x 0 =	0 /	0 =	0	<u>0</u>
TOTAL CAPABILITY								6696

C-5

SUU								
CPAC	2661	- 0 =	2661	x .461 =	1226.72 /	29.37 =	42	1890
NPAC	2661	- 0 =	2662	x .105 =	279.41 /	26.49 =	11	<u>495</u>
TOTAL CAPABILITY								2385

1. From Appendix F.
2. Based on 6.8% (Table 4.2) of planned channel hours. There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

Pacific Region (22 AF)  
April - June 1987 (Third Quarter)

C-141

MAI	Plan Chan1 Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	15857	- 983	= 14874	x .052	= 773.45	/ 15.84	= 49	882
NPAC	15857	- 983	= 14874	x .133	= 1978.24	/ 32.96	= 60	1080
SBD								
CPAC	15857	- 983	= 14874	x .039	= 580.09	/ 50.20	= 12	216
SPAC	15857	- 983	= 14874	x .039	= 580.09	/ 50.20	= 12	216
SUU								
CPAC	15857	- 983	= 14874	x .701	= 10426.67	/ 43.22	= 241	4338
NPAC	15857	- 983	= 14874	x .007	= 104.12	/ 29.21	= 4	<u>72</u>
TOTAL CAPABILITY								6804

C-5

SUU								
CPAC	2690	- 0	= 2690	x .648	= 1743.12	/ 27.35	= 64	2880
NPAC	2690	- 0	= 2690	x .101	= 271.69	/ 27.94	= 10	<u>450</u>
TOTAL CAPABILITY								3330

1. From Appendix F.
2. Based on 6.2% (Table 4.2) of planned channel hours. There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

Pacific Region (22 AF)  
July - September 1987 (Fourth Quarter)

C-141

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Length <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
TCM								
ALA	16042	- 1027	= 15015	x .062	= 930.93	/ 15.80	= 59	1062
NPAC	16042	- 1027	= 15015	x .138	= 2072.07	/ 37.08	= 56	1008
SBD								
CPAC	16042	- 1027	= 15015	x .040	= 600.60	/ 50.58	= 12	216
SPAC	16042	- 1027	= 15015	x .040	= 600.60	/ 50.58	= 12	216
SUU								
CPAC	16042	- 1027	= 15015	x .642	= 9639.63	/ 41.84	= 230	4140
NPAC	16042	- 1027	= 15015	x .020	= 300.30	/ 28.65	= 10	<u>180</u>
TOTAL CAPABILITY								6822

C-5

SUU								
CPAC	2710	-	0	= 2710	x .595	= 1612.45	/ 29.44	= 55 2475
NPAC	2710	-	0	= 2710	x .134	= 363.14	/ 29.33	= 12 <u>540</u>
TOTAL CAPABILITY								3015

1. From Appendix F.
2. Based on 6.4% (Table 4.2) of planned channel hours. There are no intra-theater channel hours for the C-5.
3. From Table 4.3 or Appendix C.
4. Based on 18 tons (C-141) and 45 tons (C-5) for 22 AF sorties.

Atlantic Region (21 AF)  
October - December 1986 (First Quarter)

C-141

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
<b>DOV</b>								
GER	13095 -	236 =	12859	x .066 =	848.69 /	29.02 =	29	580
MED	13095 -	236 =	12859	x .108 =	1388.77 /	28.74 =	48	960
M/E	13095 -	236 =	12859	x .014 =	180.03 /	30.17 =	6	120
<b>WRI</b>								
LGS	13095 -	236 =	12859	x .092 =	1183.03 /	23.69 =	50	1000
MED	13095 -	236 =	12859	x .160 =	2057.44 /	31.39 =	66	1320
N/C	13095 -	236 =	12859	x .076 =	977.28 /	14.25 =	69	1380
<b>CHS</b>								
AFR	13095 -	236 =	12859	x .019 =	244.32 /	37.12 =	7	140
BDA	13095 -	236 =	12859	x .006 =	77.15 /	12.72 =	6	120
C/S	13095 -	236 =	12859	x .047 =	604.37 /	14.66 =	41	820
UK	13095 -	236 =	12859	x .078 =	1003.00 /	18.66 =	54	1080
<b>COF</b>								
AFR	13095 -	236 =	12859	x .049 =	630.09 /	25.90 =	24	480
<b>NGU</b>								
AFR	13095 -	236 =	12859	x .050 =	642.95 /	50.83 =	13	260
CARIB	13095 -	236 =	12859	x .025 =	321.48 /	10.66 =	30	600
MED	13095 -	236 =	12859	x .170 =	2186.03 /	32.70 =	67	1340
M/E	13095 -	236 =	12859	x .015 =	192.89 /	35.50 =	5	100
N/C	13095 -	236 =	12859	x .025 =	321.48 /	13.08 =	25	<u>500</u>
TOTAL CAPABILITY							10800	

1. From Appendix F.
2. Based on 1.8% (Table 4.2) of planned channel hours.
3. From Table 4.4 or Appendix C.
4. Based on 20 tons for 21 AF C-141 sorties.

Atlantic Region (21 AF)  
October - December 1986 (First Quarter)

C-5

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	2910 -	0 =	2910	x .273 =	794.43 /	17.30 =	46	2300
MED	2910 -	0 =	2910	x .218 =	634.38 /	27.15 =	23	1150
M/E	2910 -	0 =	2910	x .377 =	1097.07 /	32.03 =	34	1700
NGU								
MED	2910 -	0 =	2910	x .132 =	384.12 /	32.83 =	12	600
CHS								
C/S	2910 -	0 =	2910	x 0 =	0 /	0 =	0	0
COF								
AFR	2910 -	0 =	2910	x 0 =	0 /	0 =	0	0
TIK								
GER <sup>5</sup>	2710 -	0 =	2710	x .515 =	1395.65 /	30.15 =	46	<u>2070</u>
TOTAL CAPABILITY								7820

1. From Appendix F.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
January - March (Second Quarter)

C-141

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	12835 -	231 =	12604	x .053 =	668.01 /	30.35 =	22	440
MED	12835 -	231 =	12604	x .074 =	932.70 /	30.47 =	31	620
M/E	12835 -	231 =	12604	x .014 =	176.46 /	30.21 =	6	120
WRI								
LGS	12835 -	231 =	12604	x .093 =	1172.17 /	23.88 =	49	980
MED	12835 -	231 =	12604	x .203 =	2558.61 /	29.70 =	86	1720
N/C	12835 -	231 =	12604	x .071 =	894.88 /	14.24 =	63	1260
CHS								
AFR	12835 -	231 =	12604	x .016 =	201.66 /	38.17 =	5	100
BDA	12835 -	231 =	12604	x .006 =	75.62 /	12.72 =	6	120
C/S	12835 -	231 =	12604	x .047 =	592.39 /	15.13 =	39	780
UK	12835 -	231 =	12604	x .084 =	1058.74 /	18.81 =	56	1120
COF								
AFR	12835 -	231 =	12604	x .047 =	592.39 /	26.46 =	22	440
NGU								
AFR	12835 -	231 =	12604	x .055 =	693.22 /	51.07 =	14	280
CARIB	12835 -	231 =	12604	x .025 =	315.10 /	10.71 =	29	580
MED	12835 -	231 =	12604	x .171 =	2155.28 /	32.93 =	65	1300
M/E	12835 -	231 =	12604	x .017 =	214.27 /	35.67 =	6	120
N/C	12835 -	231 =	12604	x .024 =	302.50 /	13.25 =	23	460
TOTAL CAPABILITY								10440

1. From Appendix F.
2. Based on 1.8% (Table 4.2) of planned channel hours.
3. From Table 4.4 or Appendix C.
4. Based on 20 tons for 21 AF C-141 sorties.

Atlantic Region (21 AF)  
January - March 1987 (Second Quarter)

C-5

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	2781 -	0 =	2781	x .254 =	706.37 /	17.30 =	41	2050
MED	2781 -	0 =	2781	x .231 =	642.41 /	27.18 =	24	1200
M/E	2781 -	0 =	2781	x .370 =	1028.97 /	31.92 =	32	1600
NGU								
MED	2781 -	0 =	2781	x .145 =	403.25 /	32.83 =	12	600
CHS								
C/S	2781 -	0 =	2781	x 0 =	0 /	0 =	0	0
COF								
AFR	2781 -	0 =	2781	x 0 =	0 /	0 =	0	0
TIK								
GER <sup>5</sup>	2661 -	0 =	2661	x .434 =	1154.87 /	30.20 =	38	<u>1710</u>
TOTAL CAPABILITY								7160

1. From Appendix F.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
April - June 1987 (Third Quarter)

C-141

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngh <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
<b>DOV</b>								
GER	12945	- 194	= 12751	x .044	= 561.04	/ 32.03	= 18	360
MED	12945	- 194	= 12751	x .049	= 624.80	/ 31.43	= 20	400
MED <sup>5</sup>	15857	- 983	= 14874	x .002	= 29.75	/ 39.42	= 1	18
MED <sup>6</sup>	15857	- 983	= 14874	x .003	= 44.62	/ 39.42	= 1	18
MED <sup>7</sup>	15857	- 983	= 14874	x .005	= 74.37	/ 37.67	= 2	36
M/E	12945	- 194	= 12751	x .014	= 178.51	/ 30.17	= 6	120
M/E <sup>5</sup>	15857	- 983	= 14874	x .003	= 44.62	/ 44.92	= 1	18
M/E <sup>6</sup>	15857	- 983	= 14874	x .003	= 44.62	/ 44.00	= 1	18
M/E <sup>7</sup>	15857	- 983	= 14874	x .005	= 74.37	/ 44.92	= 2	36
<b>WRI</b>								
LGS	12945	- 194	= 12751	x .094	= 1198.59	/ 23.91	= 50	1000
MED	12945	- 194	= 12751	x .212	= 2703.21	/ 29.09	= 90	1860
MED <sup>5</sup>	15757	- 983	= 14874	x .002	= 29.75	/ 33.83	= 1	18
MED <sup>6</sup>	15757	- 983	= 14874	x .004	= 59.50	/ 33.83	= 2	36
MED <sup>7</sup>	15757	- 983	= 14874	x .002	= 29.75	/ 33.83	= 1	18
N/C	12945	- 194	= 12751	x .076	= 969.08	/ 14.25	= 68	1360
<b>CHS</b>								
AFR	12945	- 194	= 12751	x .016	= 204.02	/ 37.38	= 5	100
BDA	12945	- 194	= 12751	x .005	= 63.76	/ 12.69	= 5	100
C/S	12945	- 194	= 12751	x .051	= 650.30	/ 15.60	= 42	840
UK	12945	- 194	= 12751	x .084	= 1071.08	/ 19.34	= 55	1100
<b>COF</b>								
AFR	12945	- 194	= 12751	x .046	= 586.55	/ 25.93	= 23	460
<b>NGU</b>								
AFR	12945	- 194	= 12751	x .053	= 675.80	/ 51.13	= 13	260
CARIB	12945	- 194	= 12751	x .024	= 306.02	/ 10.70	= 29	580
MED	12945	- 194	= 12751	x .187	= 2384.44	/ 31.43	= 76	1520
M/E	12945	- 194	= 12751	x .010	= 127.51	/ 35.42	= 4	80
N/C	12945	- 194	= 12751	x .035	= 446.29	/ 13.94	= 32	640
<b>TOTAL CAPABILITY</b>								<b>10996</b>

1. From Appendix F.
2. Based on 1.5% (21 AF) and 6.2% (22 AF) of planned channel hours (Table 4.2).
3. From Table 4.4 or Appendix C.
4. Based on 20 tons (21 AF) and 18 tons (22 AF) for C-141 sorties.
5. This MAI is served by McChord (TCM) from 22 AF.
6. This MAI is served by Norton (SBD) from 22 AF.
7. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
April - June 1987 (Third Quarter)

C-5

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	2900 -	0 =	2900	x .345 =	1000.50 /	17.39 =	58	2900
MED	2900 -	0 =	2900	x .244 =	707.60 /	25.85 =	27	1350
M/E	2900 -	0 =	2900	x .232 =	672.80 /	32.05 =	21	1050
NGU								
MED	2900 -	0 =	2900	x .152 =	440.80 /	32.14 =	14	700
CHS								
C/S	2900 -	0 =	2900	x .019 =	55.10 /	12.33 =	4	200
COF								
AFR	2900 -	0 =	2900	x .008 =	23.20 /	27.00 =	1	50
TIK								
GER <sup>5</sup>	2690 -	0 =	2690	x .251 =	675.19 /	28.34 =	24	<u>1080</u>
TOTAL CAPABILITY								7330

1. From Appendix F.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
July - September 1987 (Fourth Quarter)

C-141

MAI	Plan Chan1 Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
<b>DOV</b>								
GER	13095	- 262	= 12833	x .050	= 641.65	/ 32.09	= 20	400
MED	13095	- 262	= 12833	x .011	= 141.16	/ 27.92	= 5	100
MED <sup>5</sup>	16042	- 1027	= 15015	x .007	= 105.11	/ 38.72	= 3	54
MED <sup>6</sup>	16042	- 1027	= 15015	x .004	= 60.06	/ 37.92	= 2	36
MED <sup>7</sup>	16042	- 1027	= 15015	x .005	= 75.08	/ 38.17	= 2	36
M/E	13095	- 262	= 12833	x .016	= 205.33	/ 30.17	= 7	140
M/E <sup>5</sup>	16042	- 1027	= 15015	x .013	= 195.20	/ 44.00	= 4	72
M/E <sup>6</sup>	16042	- 1027	= 15015	x .011	= 165.17	/ 43.88	= 4	72
M/E <sup>7</sup>	16042	- 1027	= 15015	x .010	= 150.15	/ 43.73	= 3	54
<b>WRI</b>								
LGS	13095	- 262	= 12833	x .108	= 1385.96	/ 24.64	= 56	1120
MED	13095	- 262	= 12833	x .217	= 2784.76	/ 30.10	= 93	1860
MED <sup>5</sup>	16042	- 1027	= 15015	x .002	= 30.03	/ 33.83	= 1	18
MED <sup>6</sup>	16042	- 1027	= 15015	x .002	= 30.03	/ 33.83	= 1	18
MED <sup>7</sup>	16042	- 1027	= 15015	x .004	= 60.06	/ 33.83	= 2	36
N/C	13095	- 262	= 12833	x .090	= 1154.97	/ 14.00	= 82	1640
<b>CHS</b>								
AFR	13095	- 262	= 12833	x .018	= 230.99	/ 37.58	= 6	120
BDA	13095	- 262	= 12833	x .007	= 89.83	/ 12.73	= 7	140
C/S	13095	- 262	= 12833	x .056	= 718.65	/ 15.63	= 46	920
UK	13095	- 262	= 12833	x .097	= 1244.80	/ 19.16	= 65	1300
<b>COF</b>								
AFR	13095	- 262	= 12833	x .055	= 705.82	/ 26.41	= 27	540
<b>NGU</b>								
AFR	13095	- 262	= 12833	x .033	= 423.49	/ 51.71	= 8	160
CARIB	13095	- 262	= 12833	x .027	= 346.49	/ 10.59	= 33	660
MED	13095	- 262	= 12833	x .168	= 2155.94	/ 31.01	= 70	1400
M/E	13095	- 262	= 12833	x .019	= 243.83	/ 35.32	= 7	140
N/C	13095	- 262	= 12833	x .028	= 359.32	/ 13.17	= 27	540
<b>TOTAL CAPABILITY</b>								<b>11576</b>

1. From Appendix F.
2. Based on 2.0% (21 AF) and 6.4% (22 AF) of planned channel hours (Table 4.2).
3. From Table 4.4 or Appendix C.
4. Based on 20 tons (21 AF) and 18 tons (22 AF) for C-141 sorties.
5. This MAI is served by McChord (TCM) from 22 AF.
6. This MAI is served by Norton (SBD) from 22 AF.
7. This MAI is served by Travis (SUU) from 22 AF.

Atlantic Region (21 AF)  
July - September 1987 (Fourth Quarter)

C-5

MAI	Plan Chanl Hours <sup>1</sup>	Plan Intra Hours <sup>2</sup>	Plan Inter Hours	MAI Portion <sup>3</sup>	MAI Fly Hours	Avg Msn Lngth <sup>3</sup>	Num of Msns	MAI Air Cap <sup>4</sup>
DOV								
GER	2900 -	0 =	2900	x .366 =	1061.40 /	17.33 =	61	3050
MED	2900 -	0 =	2900	x .341 =	988.90 /	24.41 =	41	2050
M/E	2900 -	0 =	2900	x .124 =	359.60 /	32.17 =	11	550
NGU								
MED	2900 -	0 =	2900	x .130 =	377.00 /	31.30 =	12	600
CHS								
C/S	2900 -	0 =	2900	x .039 =	113.10 /	18.54 =	6	300
COF								
AFR	2900 -	0 =	2900	x 0 =	0 /	0 =	0	0
TIK								
GER <sup>5</sup>	2710 -	0 =	2710	x .271 =	734.41 /	30.75 =	24	<u>1080</u>
TOTAL CAPABILITY								7630

1. From Appendix F.
2. There are no intra-theater channel hours for the C-5.
3. From Table 4.4 or Appendix C.
4. Based on 50 tons (21 AF) and 45 tons (22 AF) for C-5 sorties.
5. This MAI is served by Travis (SUU) from 22 AF.

Appendix H: FY 87 Actual Scheduled Airlift Capability in Tons

From the MAC Monthly Cargo Schedules for Fiscal Year 1987.

Pacific Region (22 AF)  
October - December 1986 (First Quarter)

C-141

C-5

<u>October</u>				<u>October</u>			
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
P555A	72	P5K6P	54	P6K5A	18	P351A	180
P577A	90	P681T	72	P851A	90	P353A	135
P587A	18	P691P	72	P8E1A	72	P371A	225
P5C1A	90	P694P	72	R687A	54	P3C1A	90
P5E3A	18	P695A	72	R688A	18	P3K2A	180
P5E3A	18	P6E3A	90	R877A	18	TOTAL	810
P5K5A	72	P8E1A	72	R8K3P	54		
P5K5A	18	R687A	90	Y531C	90		
P691A	72	R8K3A	72	Y551A	54		
P694A	90	R8K5A	18	Y551A	18	<u>November</u>	
P695A	72	Y531C	72	Y553A	54	P352A	45
P6E3A	36	Y551A	126	Y554A	90	P353A	45
P851A	72	Y553A	36	Y5C2A	72	P371A	180
P8E1A	90	Y554T	72	Y655A	72	P3C1A	45
R687A	72	Y5C4A	90	Y656A	18	P3C2A	45
RAK3A	72	Y655T	54	Y686A	54	P3K2A	90
Y532T	72	Y656T	18	Y688A	18	P3K3A	45
Y551A	72	Y686P	72	Y6K5A	18	P3K3A	45
Y552A	54	Y807A	378	Y805B	36	Y352T	90
Y553A	36	Y897A	90	Y805B	18	Y353T	135
Y5C1P	72	Y810T	72	Y805B	18	TOTAL	765
Y5C2A	72	Y842A	36	Y807B	396		
Y653A	54	Y843B	36	Y807B	54		
Y654A	18	Y895B	36	Y842A	36	<u>December</u>	
Y686P	90	Y899A	36	Y843A	36	P353A	45
Y6K4B	72	TOTAL	2142	Y894B	36	P371A	135
Y807A	486			Y899A	36	P3C1A	45
Y807A	72	<u>December</u>		TOTAL	2250	P3K2A	90
Y842T	36	P551P	36			Y352A	45
Y843T	36	P553P	18			Y353A	135
Y897A	36	P555A	72			TOTAL	495
Y899A	36	P556A	72				
TOTAL	2286	P557A	18				
		P577A	72				
<u>November</u>		P5K5P	54				
P555A	72	P691P	72				
P578T	72	P694P	72				
P587P	18	P695P	90				
P5COA	36	P6E3A	72				
P5C1A	36	P6K1A	54				



Pacific Region (22 AF)  
 April - June 1987 (Third Quarter)

C-141

C-5

<u>April</u>						<u>April</u>	
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
P555A	72	P6E5A	36	P6E5A	36	9NK1A	45
577A	90	P8E1A	90	P801T	468	P371A	225
P5C3A	90	R651A	72	P803T	72	P3C1A	90
P5G1P	36	R687A	72	P8E1A	72	P3C1A	90
P5K5P	36	R688A	18	R651A	90	P3C1A	45
P5K5P	18	R8K3P	72	R687A	72	P3G1B	90
P691P	72	R8K4P	18	R8K3P	54	P3K2B	90
P694P	90	Y531A	72	R8K4P	18	Y353D	180
P695A	90	Y551A	72	Y531A	90	TOTAL	855
P6E3A	72	Y552A	36	Y551A	72		
P8E1A	72	Y553B	36	Y552A	36	<u>May</u>	
R652A	54	Y581A	18	Y553A	36	9NK1A	45
R652A	18	Y5C1P	72	Y5C1P	90	P352A	45
R687A	72	Y5C2A	18	Y5C2A	72	P353A	45
R8K3P	72	Y5C2A	36	Y653A	72	P371A	45
Y531A	72	Y5C4B	18	Y654A	18	P372B	135
Y551B	72	Y5G6B	18	Y686A	54	P3C1A	90
Y552C	54	Y653B	54	Y688A	18	P3K2B	180
Y553B	36	Y654A	18	Y842A	36	P3K3A	45
Y5C1B	72	Y686P	54	Y843A	36	Y354B	45
Y5C2B	72	Y688P	18	Y894A	36	Y356A	135
Y653C	54	Y801A	54	Y899A	36	Y357A	45
Y654C	18	Y801A	18	TOTAL	2160	TOTAL	855
Y686B	72	Y805B	54				
Y6K4A	72	Y806A	72			<u>June</u>	
Y806P	90	Y807A	288			P351A	45
Y807B	378	Y808A	54			P352A	45
Y808B	72	Y809B	18			P353A	90
Y842A	36	Y842A	54			P371A	180
Y843A	36	Y843A	36			P3K2A	135
Y897A	36	Y895A	36			P3K3B	45
Y899A	36	Y849A	36			Y353A	135
TOTAL	2232	TOTAL	2196			Y354A	45
						TOTAL	720
<u>May</u>		<u>June</u>					
P555A	72	P555A	90				
P577A	72	P577A	72				
P5C1A	72	P5C1A	72				
P5K3P	54	P5K5P	54				
P5K5P	18	P5K6P	18				
P691P	72	P691P	90				
P694P	72	P694P	72				
P695A	72	P695A	72				
P6E3B	54	P6E3A	36				

Pacific Region (22 AF)  
July - September 1987 (Fourth Quarter)

C-141

C-5

<u>July</u>						<u>July</u>	
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
P555A	72	P555A	90	P555A	72	P351A	45
P577A	90	P577A	72	P577A	72	P352A	45
P5C1A	90	P5C1A	54	P5C1A	54	P353A	90
P5K5A	72	P5C2A	18	P5C2A	18	P371A	225
P5K6P	18	P691P	72	P5C3A	72	P3K2A	180
P691P	72	P694P	72	P691P	90	P3K5A	45
P694P	90	P695A	72	P694P	72	Y353B	135
P695A	90	P6E3A	54	P695A	90	Y354B	45
P6E3A	36	P6E5A	36	P6E3A	36	TOTAL	810
P6E5A	36	P6K5P	36	P6E5A	36		
P8E1A	90	P8E1A	72	P6K4P	36		
R651A	72	P8K5P	36	P807A	414		
R687A	54	R651A	90	P807A	54	<u>August</u>	
R688A	18	R687A	72	P808A	54	P351A	45
R8K3A	54	R688A	18	P808A	18	P352A	45
R8K4P	18	R8K3P	72	P8E1A	72	P353A	90
Y531A	72	R8K4P	18	P8K5P	54	P371A	135
Y551A	72	Y531A	72	R651A	72	P372A	45
Y552A	36	Y551B	90	R687A	54	P3K3A	135
Y553A	54	Y552B	18	R688A	18	P3K5A	45
Y5C1P	72	Y553B	36	R8K3P	54	Y353A	180
Y5C2A	72	Y554B	18	R8K4P	18	Y354A	45
Y653A	54	Y5C1P	90	Y531A	90	TOTAL	765
Y654A	18	Y5C2A	72	Y551B	72		
Y686A	72	Y653A	54	Y552B	36	<u>September</u>	
Y688A	18	Y654A	18	Y553C	36	P351A	45
Y6K4A	54	Y685P	18	Y554A	18	P352A	45
Y6K5A	18	Y686P	36	Y5C2A	72	P353A	90
Y801A	54	Y688A	18	Y653A	72	P371A	135
Y806A	90	Y801A	72	Y654A	18	P372A	45
Y807A	342	Y806P	108	Y685P	18	P3C1A	180
Y808A	54	Y807A	306	Y686P	36	P3K3A	135
Y809A	18	Y808A	72	Y688A	18	P3K5A	45
Y842A	36	Y842A	36	Y842A	36	TOTAL	720
Y843A	36	Y843A	54	Y843A	36		
Y897A	36	Y895A	36	Y894A	36		
Y899A	36	Y899A	36	Y899A	36		
TOTAL	2286	TOTAL	2214	TOTAL	2160		

Atlantic Region (21 AF)  
October - December 1986 (First Quarter)

C-141

<u>October</u>							
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
A463A	20	G714A	80	G477A	80	A4M3A	60
A465A	20	G715A	100	G478A	100	A4POA	20
A474A	100	G716A	80	G479A	40	A4P3A	20
A475A	80	G760A	60	G481A	40	A4P5A	20
A4M1P	160	G761A	100	G483A	140	A4P6A	20
A4M1P	20	G761A	60	G488A	20	A4S3A	20
A4M2P	40	G773A	40	G491A	20	A4V3A	60
A4M2P	40	G783A	20	G497A	20	A4V3A	20
A4M3A	80	G791A	20	G4J1A	40	A4V7A	100
A4POA	20	G7F7A	120	G4J2A	40	A4WOA	20
A4P3A	60	G7F8A	60	G4J3A	20	A4W3A	60
A4P5A	20	G7H4A	80	G4Q1A	40	A7H5A	80
A4S3A	20	G7H8A	80	G4Q3A	20	A7H6A	100
A4V1A	100	G7H8A	20	G4Q4A	20	A7H7A	80
A4V3A	80	G7K7A	40	G711A	80	A7KOA	20
A4V7A	80	N4P1P	20	G711A	80	A7K5A	160
A4W3A	100	N4P1P	20	G712A	80	A7T1A	40
A769A	80	<b>TOTAL</b>	<b>3940</b>	G713A	100	A7T1A	20
A7A1A	60			G714A	80	A7T1A	20
A7A2A	20	<u>November</u>		G715A	80	G458A	40
A7H5A	80	A464A	20	G716A	100	G459A	80
A7H6A	60	A465A	20	G760A	40	G459A	40
A7H6A	40	A474A	80	G761A	80	G477A	60
A7H7A	100	A475A	100	G761A	40	G478A	80
A7K5A	100	A4M1P	60	G769A	80	G479A	40
A7K5A	100	A4M1P	120	G773A	40	G481A	60
A7T1A	100	A4M2P	60	G787A	20	G483A	140
G458A	20	A4M3A	100	G793A	20	G488A	20
G459A	40	A4POA	20	G7F7A	120	G491A	20
G459A	80	A4P3A	40	G7F8A	40	G493A	20
G477A	100	A4P5A	20	G7H4A	60	G4J1A	20
G478A	80	A4S3A	20	G7H8A	60	G4J2A	40
G479A	60	A4V3A	100	G7K7A	40	G4J3A	20
G481A	40	A4V7A	80	N4P1P	60	G4Q1A	20
G483A	160	A4W3A	80	<b>TOTAL</b>	<b>3540</b>	G4Q2A	20
G488A	20	A7H5A	100			G4Q3A	60
G493A	20	A7H6A	80	<u>December</u>		G711A	120
G497A	20	A7H7A	80	A453A	20	G712B	80
G4J1A	40	A7K5A	80	A463A	20	G713A	80
G4J2A	40	A7K5A	80	A465A	20	G714A	100
G4Q1A	40	A7T1A	80	A474A	100	G715A	80
G4Q3A	40	G460A	40	A475A	80	G716A	80
G711A	200	G461A	100	A4M1P	200	G750A	20
G712A	80	G461A	40	A4M2P	80	G757A	20
G713A	80					G758A	40

December  
(continued)

G759A	60
G759A	40
G773A	40
G783A	20
G797A	20
G7F7A	120
G7F8A	40
G7H4A	100
G7H8A	60
G7K7A	40
N4P1P	20
N4P1P	20
N4P1P	20
TOTAL	<u>3460</u>

C-5  
October  
Cargo  
Route      Tons

A2F1A	200
A2F3A	250
A2F1A	250
A2F7A	200
A2R3A	250
A2R5A	250
A2R6A	200
A2T2A	250
A2T3A	200
G2V7A	250
F2W5B	250
S3F5A	225
S3R5A	225
TOTAL	<u>3000</u>

November

A2F3A	250
A2F5A	200
A2R2A	200
A2R3A	200
A2T2A	200
A2T3A	200
G2V7A	200
G2W5A	150
G2W6A	50
RN53A	50
RN61A	50
RN77A	100
S3R5A	360
TOTAL	<u>2210</u>

December

A2F3A	150
A2F5A	200
A2R2A	150
A2R3A	200
A2T2A	200
A2T3A	200
G2V7A	200
G2W5A	200
R077A	100
ROF1A	50
S3R5A	180
S3R5A	180
TOTAL	<u>2010</u>

Atlantic Region (21 AF)  
January - March 1987 (Second Quarter)

C-141

<u>January</u>							
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
A464A	20	G716A	80	G488A	20	A7H6A	80
A465A	20	G717A	20	G493A	20	A7H7A	80
A474A	80	G758A	40	G497A	20	A7K5A	160
A475A	80	G759A	100	G4J1A	40	A7T1A	80
A4M1P	180	G759A	40	G4J2A	40	G458A	60
A4M1P	40	G773A	40	G4Q1A	40	G459A	80
A4M2A	60	G783A	20	G4Q3A	40	G459A	40
A4M3A	80	G789A	20	G711A	160	G477A	80
A4POA	20	G7F7A	120	G712B	80	G478A	100
A4P3A	20	G7F8A	40	G713A	80	G479A	40
A4P4A	20	G7M4A	80	G714A	80	G481A	40
A4P5A	20	G7H8A	100	G715A	80	G483A	160
A4P6A	20	G7K7A	60	G716A	80	G488A	20
A4S3A	20	N4P1P	20	G758A	40	G491A	20
A4V3A	100	N4P1P	20	G759A	60	G497A	20
A4V7A	80	<u>TOTAL</u>	<u>3620</u>	G759A	40	G4J1A	60
A4W3A	100			G769A	80	G4J2A	40
A7H5A	100	<u>February</u>		G773A	40	G4Q1A	60
A7H6A	80	A463A	20	G783A	20	G4Q2A	40
A7H7A	100	A465A	20	G791A	20	G4W3A	80
A7K5A	180	A474A	80	G7F7A	120	G711A	160
A7TOA	20	A475A	80	G7F8A	40	G712A	100
A7T1A	80	A4M1P	120	G7H4A	80	G713A	100
G458A	40	A4M1P	40	G7H8A	80	G714B	100
G459A	80	A4M1P	40	G7K7A	40	G715B	80
G459A	60	A4M2A	60	N4P1P	40	G716B	80
G477A	100	A4M3A	80	N4P1P	20	G758A	40
G478A	80	A4POA	20	<u>TOTAL</u>	<u>3320</u>	G759A	100
G479A	40	A4S3A	20			G759A	40
G481A	40	A4V3A	80	<u>March</u>		G787A	20
G483A	120	A4V7A	80			G793A	20
G487A	20	A4W3A	80	A464A	20	G7F7A	140
G491A	20	A7H5A	80	A465A	20	G7F8A	40
G493A	20	A7H6A	80	A474A	80	G7H4A	100
G497A	20	A7H7A	80	A475A	100	G7H8A	80
G4J1A	40	A7K5A	160	A4M1P	20	G7K7A	40
G4J2A	40	A7T1A	80	A4M1P	140	N4P1P	20
G4Q1A	40	G458A	40	A4M2P	60	N4P1P	20
G4Q3A	40	G459A	100	A4M2P	40	N4P1P	20
G709A	20	G459A	40	A4M3A	100	<u>TOTAL</u>	<u>3520</u>
G711A	160	G477A	80	A4POA	20		
G712A	80	G478A	80	A4S3A	20		
G713A	80	G479A	40	A4V3A	80		
G714A	80	G481A	40	A4V7A	100		
G715A	80	G483A	140	A7H5A	80		

## C-5

<u>January</u>		<u>February</u>		<u>March</u>	
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
A2F3A	200	A2F3A	200	A2F3A	250
A2F5A	250	A2F5A	200	A2F5A	200
A2R2A	250	A2R2A	200	A2R2A	200
A2R3A	250	A2R3A	200	A2R3A	200
A2T2A	250	A2R5A	200	A2R5A	250
A2T3A	200	A2T2A	200	A2T2A	200
G2V7B	250	A2T3A	200	A2T3A	250
G2W5A	200	G2V7B	200	G2V7B	200
GFR7A	100	GFR7A	100	GFR7A	100
S3R5A	180	R077A	100	R077A	100
S3R5A	180	S3R5A	180	R0R5A	50
TOTAL	<u>2310</u>	S3R5A	180	SR30A	180
		TOTAL	<u>2160</u>	SR35A	<u>180</u>
				TOTAL	<u>2360</u>

Atlantic Region (21 AF)  
April - June 1987 (Third Quarter)

C-141

<u>April</u>							
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
A463A	20	G759A	60	G487B	20	A4M7A	20
A465A	20	G759A	40	G491A	20	A4P3P	40
A474A	100	G759A	40	G493A	20	A4V3A	80
A475A	80	G773A	20	G497A	20	A4V7A	100
A4M1A	40	G783A	20	G4J1A	40	A7H5A	80
A4M1A	140	G797A	20	G4J2A	60	A7H6A	80
A4M2A	80	G7F7A	120	G4Q1A	20	A7H7A	80
A4M3A	80	G7F8A	60	G4Q1A	20	A7K5A	160
A4POA	20	G7H4A	80	G4Q3A	40	A7P3A	20
A4P3A	40	G7H8A	100	G4W3A	80	A7P6A	20
A4S3A	20	G7K7A	40	G711A	180	A7T1A	80
A4VOA	20	N4P1P	20	G712A	80	G458A	40
A4V3A	60	RI73A	20	G713A	100	G459A	60
A3V7A	80	RIM1P	20	G714A	80	G459A	40
A7H5A	80	TOTAL	3520	G715A	80	G477A	80
A7H6A	100			G716A	100	G478A	80
A7H7A	80	<u>May</u>		G758A	40	G479B	40
A7K5A	100	A464A	20	G759A	80	G481A	40
A7P3P	40	A465A	20	G759A	60	G483A	160
A7T1A	80	A475A	100	G773A	20	G487A	20
G458A	40	A4M1P	40	G783A	20	G488A	20
G459A	80	A4M1P	120	G789A	20	G493A	20
G459A	40	A4M2P	80	G7F7A	120	G497A	20
G477A	100	A4M2P	80	G7F8A	40	G4JOA	20
G478A	80	A4M3A	100	G7H4A	60	G4J1A	20
G479A	40	A4M7A	20	G7H4A	20	G4J2A	20
G481A	40	A4P3P	60	G7H8A	80	G4J3A	20
G483A	180	A4S3A	20	G7K7B	40	G4Q0A	20
G487A	20	A4V3A	100	N4P1P	40	G4Q1A	40
G488A	20	A4V7A	80	RI73A	20	G4Q3A	40
G491A	20	A7H5A	100	RIP1P	20	G711A	160
G493A	20	A7H6A	80	S6F1A	18	G712A	100
G4J1A	40	A7H7A	100	S6R1A	18	G713A	80
G4J2A	20	A7K5A	180	TOTAL	3616	G714A	100
G4J6A	20	A7P3A	20			G715A	80
G4Q1A	40	A7P6A	20	<u>June</u>		G716A	80
G4Q3A	40	A7T1A	100	A463A	20	G758A	60
G4W3A	100	G458A	40	A465A	20	G759A	120
G711A	180	G459A	100	A475A	80	G773C	20
G712A	80	G459A	40	A4C3A	20	G783A	20
G713A	80	G477A	80	A4M1P	120	G791A	20
G714A	80	G478A	100	A4M1P	40	G7C7A	40
G715C	100	G479A	60	A4M2P	80	G7F7A	140
G716B	80	G481B	40	A4M3A	80	G7F8A	40
G758A	40	G483A	120			G7M4A	100

May  
(continued)

Cargo Route	Tons
G7H8A	80
G7K7A	40
N4P1P	40
AI73A	20
RIC7A	40
RIM1P	20
S6F1A	18
S6R1A	36
TOTAL	<u>3494</u>

April

Cargo Route	Tons	Cargo Route	Tons
A2FOA	50	G2V7A	200
A2F3A	200	R077A	100
A2F5A	200	R086A	100
A2R2A	250	SR35A	<u>270</u>
A2R3A	200	TOTAL	<u>2320</u>
A2R5A	150		
A2T2A	150		
A2T3A	200		
A2T4A	50		
FGR7A	100		
G2V7B	250		
R077A	100		
ROR5A	50		
S3FOA	90		
S3R5A	<u>315</u>		
TOTAL	<u>2355</u>		

May

A2F3A	200
A2F5A	250
A2R2A	150
A2R3A	250
A2R5A	200
A2TOA	50
A2T2A	200
A2T3A	200
FGR7A	100
G2V7A	200
R077A	100
ROR6A	50
ROR7A	50
S3R5A	180
S3R5A	135
S3R6A	<u>45</u>
TOTAL	<u>2360</u>

June

A2F1A	50
A2F1A	50
A2F3A	250
A2F5A	200
A2R2A	150
A2R3A	200
A2R5A	200
A2T2A	200
A2T3A	250
FGR7A	100

Atlantic Region (21 AF)  
July - September 1987 (Fourth Quarter)

C-141

<u>July</u>							
Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons	Cargo Route	Tons
A464A	20	G7F7A	140	G493A	20	G458C	100
A465A	20	G7F8B	40	G4J1A	60	G459A	160
A473A	100	G7M4A	80	G4J2A	40	G460B	80
A475A	80	G7H8A	20	G4Q1A	40	G477A	80
A4M1P	180	G7H8A	80	G4Q3A	60	G478A	80
A4M2P	80	G7K7C	60	G711A	160	G479A	40
A4M3A	80	N4P1P	40	G712A	80	G481B	40
A4M7A	20	N4P1P	20	G713A	100	G483A	140
A4P3P	40	N4P1P	20	G714A	100	G488A	20
A453A	20	RI73A	20	G715A	80	G491A	20
A4V3A	80	RI79A	20	G716A	100	G493A	20
A4V7A	80	RIC7A	40	G773A	20	G497A	20
A7H5A	80	TOTAL	3800	G783A	20	G4J1A	40
A7H6A	100			G797A	20	G4J2A	40
A7H7A	100	<u>August</u>		G7C7A	40	G4Q1A	40
A7K5A	100			G7F7A	120	G4Q3A	40
A7K6A	100	A463A	20	G7F8B	40	G4W3C	80
A7P3P	40	A465A	20	G7H4A	100	G710P	80
A7T1A	80	A473A	80	G7H8A	80	G711B	80
G458A	80	A475A	100	G7K7S	40	G712C	100
G459A	180	A4C3A	20	N4P1P	40	G713C	80
G459A	40	A4M1P	140	RI73A	20	G714A	80
G459A	60	A4M1P	40	RI79A	20	G715A	100
G477A	100	A4M2P	80	R9C7A	60	G716A	80
G478A	80	A4M3A	100	TOTAL	3620	G773A	20
G479A	40	A4M7A	20			G783A	40
G481B	60	A4V3A	100	<u>September</u>		G7C7B	40
G483A	140	A4V7A	100			G7F7A	140
G488A	20	A7H5A	100	A464A	20	G7F8A	60
G491A	20	A7H6A	80	A465A	20	G7H4A	80
G497A	20	A7H7A	80	A473A	100	G7H8A	80
G4J1A	40	A7K5A	80	A475A	80	G7K7A	40
G4J2A	40	A7K6A	80	A4C3A	20	N4P1P	20
G4Q1A	40	A7P3P	20	A4M1P	220	N4P1P	20
G4Q3A	40	A7T1A	100	A4M2P	60	RI73A	20
G4W3A	100	G458A	80	A4M3A	80	RI79A	20
G711A	200	G459A	180	A4M7A	20	RIC7A	40
G712A	80	G459A	80	A4V3A	80	TOTAL	3560
G713A	80	G477A	80	A4V7A	80		
G714A	80	G478B	100	A7H5A	80		
G715A	100	G479A	40	A7H6A	100		
G716A	80	G481B	40	A7H7A	80		
G773A	40	G483A	160	A7K5P	80		
G783A	40	G488A	20	A7K6A	100		
G793A	20	G491A	20	A7T1A	80		

C-5

<u>July</u>		<u>August</u>		<u>September</u>	
<u>Cargo</u> <u>Route</u>	<u>Tons</u>	<u>Cargo</u> <u>Route</u>	<u>Tons</u>	<u>Cargo</u> <u>Route</u>	<u>Tons</u>
A2F3A	200	A2F3A	200	A2F3A	250
A2F5A	250	A2F5A	200	A2F5A	200
A2R2A	250	A2R2A	200	A2R2A	200
A2R3A	100	A2R3A	100	A2R3A	100
A2R5A	300	A2R5A	250	A2R5A	300
A2T2A	250	A2R5A	150	A2T2A	200
A2T3A	200	A2T2A	200	A2T3A	200
G2V7A	250	A2T3A	250	G2V7C	200
R977A	100	FGR7A	100	R077A	100
ROR6A	100	G2V7B	200	ROR6A	100
S3R5A	225	R077A	100	S3R5A	<u>225</u>
S3R5A	<u>225</u>	ROR6A	100	TOTAL	2075
TOTAL	2450	S3R5A	180		
		S3R5A	<u>90</u>		
		TOTAL	2320		

Appendix I: FY 87 Channel Cargo Forecasts

From the Annual Airlift Requirements - Service Consolidation document for FY 87.

Pacific Region (22 AF)

FROM TRAVIS (SUU) TO:	QTR 1	QTR 2	QTR 3	QTR 4
Central Pacific (CPAC)				
CRK	690	579	804	720
CUA	1152	1068	1068	1143
HIK	1929	1950	2076	1932
JON	6	6	6	6
KWA	54	54	54	57
MDY	15	12	12	15
NKW	300	231	303	225
SGP	21	15	15	15
UAM	753	750	780	843
CRK (from DOV)	120	114	105	99
CRK (from TIK)	309	291	219	408
UAM (from TIK)	159	222	228	183
TOTAL FOR MAI SUU - CPAC	5508	5292	5670	5649
North Pacific (NPAC)				
DNA	201	207	252	264
OSN	1425	1377	1368	1524
DNA (from DOV)	78	90	87	39
OKO (from DOV)	24	24	33	33
OSN	60	54	48	54
DNA (from TIK)	456	528	654	660
MSJ (from TIK)	90	48	84	24
OKO (from TIK)	162	174	243	201
TOTAL FOR MAI SUU - NPAC	2496	2502	2769	2799
FROM NORTON (SBD) TO:				
Central Pacific (CPAC)				
DNA	492	456	450	498
HIK	300	309	327	345
TOTAL FOR MAI SBD - CPAC	792	765	777	843
South Pacific (SPAC)				
ASP	489	258	351	384
CHC	45	60	54	63
LEA	63	48	45	45
RCM	33	69	54	57
UMR	24	33	33	24
TOTAL FOR MAI SBD - SPAC	654	468	537	573

Atlantic Region (21 AF)

FROM DOVER (DOV) TO:	QTR 1	QTR 2	QTR 3	QTR 4
Germany (GER)				
FRF	6531	6534	7014	6534
RMS	4839	5337	5091	4899
SSS	3	3	3	93
THF	102	96	102	141
FRF (from SUU)	294	138	129	165
RMS (from SUU)	243	339	195	234
FRF (from TIK)	480	543	447	564
RMS (from TIK)	1173	1206	1119	1200
SSS (from TIK)	3	0	3	3
TOTAL FOR MAI DOV - GER	<u>13668</u>	<u>14196</u>	<u>14103</u>	<u>13833</u>
Mediterranean (MED)				
ADA	597	573	651	591
DIY	12	15	12	12
ESB	84	84	87	96
IGL	42	51	66	54
TOTAL FOR MAI DOV - MED	<u>735</u>	<u>723</u>	<u>816</u>	<u>753</u>
Middle East (M/E)				
AMM	18	21	24	18
CAI	117	120	150	102
DHA	249	261	276	267
JED	81	78	87	72
RUH	240	258	252	258
RUH (from TIK)	18	39	24	30
TOTAL FOR MAI DOV - M/E	<u>723</u>	<u>777</u>	<u>813</u>	<u>747</u>

Atlantic Region (21 AF)

FROM MCGUIRE (WRI) TO:	QTR 1	QTR 2	QTR 3	QTR 4
Lajes (LGS)	<u>738</u>	<u>807</u>	<u>720</u>	<u>699</u>
TOTAL FOR MAI WRI - LGS	738	807	720	699
Mediterranean (MED)				
ATH	354	357	351	354
AVB	189	231	225	207
BDS	69	93	42	69
PSA	63	69	63	63
TLV	15	12	36	21
TOJ	300	312	333	303
VWH	51	36	48	60
ZAZ	<u>39</u>	<u>42</u>	<u>39</u>	<u>90</u>
TOTAL FOR MAI WRI - MED	1080	1152	1137	1167
North Country (N/C)				
KEF	237	282	480	216
SFJ	513	387	417	327
THU	732	840	1158	804
YYR	177	63	66	66
YYT	<u>12</u>	<u>15</u>	<u>12</u>	<u>12</u>
TOTAL FOR MAI WRI - N/C	1671	1587	2133	1425
FROM PATRICK (COF) TO:				
Africa (AFR)				
ASI	204	201	207	228
GBI	24	30	33	24
JNB	3	6	9	3
SJH	<u>120</u>	<u>126</u>	<u>117</u>	<u>123</u>
TOTAL FOR MAI COF - AFR	351	363	366	378

Atlantic Region (21 AF)

FROM CHARLESTON (CHS) TO:	QTR 1	QTR 2	QTR 3	QTR 4
Africa (AFR)				
FIH	18	39	24	24
ROB	<u>30</u>	<u>30</u>	<u>36</u>	<u>30</u>
TOTAL FOR MAI CHS - AFR	48	69	60	54
Bermuda (BDA)				
TOTAL FOR MAI CHS - BDA	<u>441</u>	<u>393</u>	<u>420</u>	<u>477</u>
Central/South America				
ASU	15	12	12	15
BUE	6	3	6	9
HOW	1788	1668	1785	1674
LIM	30	24	27	18
LPB	21	12	18	33
MVD	0	0	0	6
PLA	27	21	0	3
RIO	15	36	21	21
SAL	27	9	9	12
SCL	<u>18</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL FOR MAI CHS - C/S	1947	1785	1878	1791
United Kingdom (UK)				
BWY	69	72	102	93
MHZ	654	780	837	717
PIK	462	450	471	459
BWY (from TIK)	78	90	69	114
MHZ (from TIK)	<u>690</u>	<u>858</u>	<u>927</u>	<u>900</u>
TOTAL FOR MAI CHS - UK	1953	2250	2406	2283

Atlantic Region (21 AF)

FROM NORFOLK (NGU) TO:	QTR 1	QTR 2	QTR 3	QTR 4
Africa (AFR)				
KRT	12	3	3	6
MGQ	15	9	0	0
NBO	<u>18</u>	<u>18</u>	<u>21</u>	<u>21</u>
TOTAL FOR MAI NGU - AFR	<u>45</u>	<u>30</u>	<u>24</u>	<u>27</u>
Caribbean (CARIB)				
NRR	558	618	555	582
GAO	<u>621</u>	<u>684</u>	<u>690</u>	<u>615</u>
TOTAL FOR MAI NGU - CARIB	<u>1179</u>	<u>1302</u>	<u>1245</u>	<u>1197</u>
Mediterranean (MED)				
NAP	501	429	432	477
OLB	135	120	105	120
RTA	480	477	552	477
SIZ	<u>852</u>	<u>759</u>	<u>825</u>	<u>858</u>
TOTAL FOR MAI NGU - MED	<u>1968</u>	<u>1785</u>	<u>1914</u>	<u>1932</u>
Middle/East (M/E)				
BAH	480	405	417	429
NKW	<u>378</u>	<u>300</u>	<u>300</u>	<u>378</u>
TOTAL FOR MAI NGU - M/E	<u>858</u>	<u>705</u>	<u>717</u>	<u>807</u>
North Country (N/C)				
	<u>474</u>	<u>477</u>	<u>555</u>	<u>516</u>
TOTAL FOR MAI NGU - N/C	<u>474</u>	<u>477</u>	<u>555</u>	<u>516</u>

Appendix J: TURBO BASIC Program for the Model

```

10   TIMES = "00:00:00"
15   OPTION BASE 1
20   PRINT
25   PRINT
30   PRINT
35   PRINT
40   PRINT "                               WELCOME TO THIS AIRLIFT CAPABILIT
Y MODEL!"
45   PRINT
50   PRINT
55   PRINT
60   PRINT
65   PRINT
70   PRINT
75   PRINT
80   PRINT
85   PRINT "       This program is for use as a management too
1 by HQ MAC/TRKC"
90   PRINT "personnel in studying the effects of matching pl
anned airlift"
95   PRINT "capability against cargo user forecasts.  The pr
ogram will"
100  PRINT "indicate a potential surplus or deficit of airli
ft capability"
105  PRINT "for each MAI."
110  PRINT
115  PRINT
120  PRINT
125  PRINT
130  '
135  '
140  '
145  PRINT
150  PRINT
155  PRINT
160  PRINT
165  INPUT "What are the 22 AF C-5 planned channel hours for
the 1st quarter?" ,PLANA1
170  PRINT
175  PRINT
180  INPUT "What are the 22 AF C-5 planned channel hours for
the 2nd quarter?" ,PLANA2
185  PRINT
190  PRINT
195  INPUT "What are the 22 AF C-5 planned channel hours for
the 3rd quarter?" ,PLANA3
200  PRINT
205  PRINT
210  INPUT "What are the 22 AF C-5 planned channel hours for
the 4th quarter?" ,PLANA4
215  DIM PCTA (3,4)
220  DATA .368, .461, .648, .595
225  DATA .117, .105, .101, .134

```

```

230 DATA .515, .434, .251, .271
235 PRINT
240 PRINT
245 FOR X = 1 TO 3
250     FOR Y = 1 TO 4
255         READ PCTA(X,Y)
260     NEXT Y
265 NEXT X
270 PRINT TAB(3)"MAI"; TAB(17)"QTR 1"; TAB(27)"QTR 2"; TAB(37)"QTR 3"; TAB(47)"QTR 4"
275 PRINT "SUU-CPAC"; TAB(17) ".368"; TAB(27) ".461"; TAB(37) ".648"; TAB(47) ".595"
280 PRINT "SUU-NPAC"; TAB(17) ".117"; TAB(27) ".105"; TAB(37) ".101"; TAB(47) ".134"
285 PRINT "SUU-TIK-GER"; TAB(17) ".515"; TAB(27) ".434"; TAB(37) ".251"; TAB(47) ".271"
290 PRINT
295 PRINT
300 PRINT "These are the MAI percentages for 22 AF C-5 channel airlift."
305 PRINT
310 INPUT "Do you wish to change any percentages? (1 for Yes or 2 for No)",YES
315 PRINT
320 IF YES = 1 THEN 335 ELSE 605
325 CHR = VAL(CHR$(13))
330 PRINT
335 INPUT "What is SUU-CPAC for the 1st quarter?", CPAC1
340     IF CPAC1 = CHR THEN CPAC1 = PCTA (1,1)
345     IF CPAC1 <> PCTA (1,1) THEN PCTA (1,1) = CPAC1
350 PRINT
355 INPUT "What is SUU-NPAC for the 1st quarter?", NPAC1
360     IF NPAC1 = CHR THEN NPAC1 = PCTA (2,1)
365     IF NPAC1 <> PCTA (2,1) THEN PCTA (2,1) = NPAC1
370 PRINT
375 INPUT "What is SUU-TIK-GER for the 1st quarter?", GER1
380     IF GER1 = CHR THEN GER1 = PCTA (3,1)
385     IF GER1 <> PCTA (3,1) THEN PCTA (3,1) = GER1
390
395 IF PCTA (1,1) + PCTA (2,1) + PCTA (3,1) <> 1 THEN PRINT:
PRINT "THE MAI PERCENTAGES FOR THE 1ST QUARTER DO NOT SUM TO 1.00.": PRINT "PLEASE ENTER ALL OF THE 1ST QUARTER PERCENTAGES AGAIN." : GOTO 330
400 PRINT
405 INPUT "What is SUU-CPAC for the 2nd quarter?", CPAC2
410     IF CPAC2 = CHR THEN CPAC2 = PCTA (1,2)
415     IF CPAC2 <> PCTA (1,2) THEN PCTA (1,2) = CPAC2
420 PRINT
425 INPUT "What is SUU-NPAC for the 2nd quarter?", NPAC2
430     IF NPAC2 = CHR THEN NPAC2 = PCTA (2,2)
435     IF NPAC2 <> PCTA (2,2) THEN PCTA (2,2) = NPAC2
440 PRINT
445 INPUT "What is SUU-TIK-GER for the 2nd quarter?", GER2

```

```

450     IF GER2 = CHR THEN GER2 = PCTA (3,2)
455     IF GER2 <> PCTA (3,2) THEN PCTA (3,2) = GER2
460     IF PCTA (1,2) + PCTA (2,2) + PCTA (3,2) <> 1 THEN PRINT:
    PRINT "THE MAI PERCENTAGES FOR THE 2ND QUARTER DO NOT SUM TO
    1.00.": PRINT "PLEASE ENTER ALL OF THE 2ND QUARTER PERCENTAG
    ES AGAIN." : GOTO 400
465     PRINT
470     INPUT "What is SUU-CPAC for the 3rd quarter?", CPAC3
475     IF CPAC3 = CHR THEN CPAC3 = PCTA(1,3)
480     IF CPAC3 <> PCTA (1,3) THEN PCTA (1,3) = CPAC3
485     PRINT
490     INPUT "What is SUU-NPAC for the 3rd quarter?", NPAC3
495     IF NPAC3 = CHR THEN NPAC3 = PCTA (2,3)
500     IF NPAC3 <> PCTA (2,3) THEN PCTA (2,3) = NPAC3
505     PRINT
510     INPUT "What is SUU-TIK-GER for the 3rd quarter?", GER3
515     IF GER3 = CHR THEN GER3 = PCTA (3,3)
520     IF GER3 <> PCTA (3,3) THEN PCTA (3,3) = GER3
525     IF PCTA (1,3) + PCTA (2,3) + PCTA (3,3) <> 1 THEN PRINT:
    PRINT "THE MAI PERCENTAGES FOR THE 3RD QUARTER DO NOT SUM TO
    1.00.": PRINT "PLEASE ENTER ALL OF THE 3RD QUARTER PERCENTAG
    ES AGAIN." : GOTO 465
530     PRINT
535     INPUT "What is SUU-CPAC for the 4th quarter?", CPAC4
540     IF CPAC4 = CHR THEN CPAC4 = PCTA(1,4)
545     IF CPAC4 <> PCTA (1,4) THEN PCTA (1,4) = CPAC4
550     PRINT
555     INPUT "What is SUU-NPAC for the 4th quarter?", NPAC4
560     IF NPAC4 = CHR THEN NPAC4 = PCTA (2,4)
565     IF NPAC4 <> PCTA (2,4) THEN PCTA (2,4) = NPAC4
570     PRINT
575     INPUT "What is SUU-TIK-GER for the 4th quarter?", GER4
580     IF GER4 = CHR THEN GER4 = PCTA (3,4)
585     PRINT
590     PRINT
595     IF GER4 <> PCTA (3,4) THEN PCTA (3,4) = GER4
600     IF PCTA (1,4) + PCTA (2,4) + PCTA (3,4) <> 1 THEN PRINT:
    PRINT "THE MAI PERCENTAGES FOR THE 4TH QUARTER DO NOT SUM TO
    1.00.": PRINT "PLEASE ENTER ALL OF THE 4TH QUARTER PERCENTAG
    ES AGAIN." : GOTO 530
605     DIM AVGA(3,4), FLYA(3,4), NUMA(3,4), CAPA(3,4)
610     '
615     DATA 29.07, 29.37, 27.35, 29.44
620     DATA 25.41, 26.49, 27.94, 29.33
625     DATA 30.15, 30.20, 28.34, 30.75
630     '
635     FOR X = 1 TO 3
640         FOR Y = 1 TO 4
645             READ AVGA(X,Y)
650             FLYA(X,1) = PLANA1 * PCTA(X,1)
655             FLYA(X,2) = PLANA2 * PCTA(X,2)
660             FLYA(X,3) = PLANA3 * PCTA(X,3)
665             FLYA(X,4) = PLANA4 * PCTA(X,4)

```

```

670         NUMA(X,Y) = CINT(FLYA(X,Y)/AVGA(X,Y))
675         CAPA(X,Y) = NUMA(X,Y) * 45
680     NEXT Y
685 NEXT X
690 PRINT
695 PRINT
700 PRINT
705 PRINT
710 '
715 PRINT TAB(3)"MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2"; TAB
(37) "QTR 3"; TAB(47) "QTR 4"
720 PRINT "SUU-CPAC"; TAB(17) CAPA(1,1); TAB(27) CAPA(1,2);
TAB(37) CAPA(1,3); TAB(47) CAPA(1,4)
725 PRINT "SUU-NPAC"; TAB(17) CAPA(2,1); TAB(27) CAPA(2,2);
TAB(37) CAPA(2,3); TAB(47) CAPA(2,4)
730 PRINT "SUU-TIK-GER"; TAB(17) CAPA(3,1); TAB(27) CAPA(3,2
); TAB(37) CAPA(3,3); TAB(47) CAPA(3,4)
735 PRINT
740 PRINT
745 PRINT "The above figures are the C-5 channel airlift cap
ability expressed in tons for the 22 AF."
750 PRINT
755 PRINT
760 PRINT
765 PRINT
770 INPUT"What are the 22 AF C-141 planned channel hours fo
r the 1st quarter?" , PLANB1
775 PRINT
780 PRINT
785 INPUT"What are the 22 AF C-141 planned channel hours fo
r the 2nd quarter?" , PLANB2
790 PRINT
795 PRINT
800 INPUT"What are the 22 AF C-141 planned channel hours fo
r the 3rd quarter?" , PLANB3
805 PRINT
810 PRINT
815 INPUT"What are the 22 AF C-141 planned channel hours fo
r the 4th quarter?" , PLANB4
820 PRINT
825 PRINT
830 PRINT
835 PRINT
840 INTAA = .076
845 INTAB = 6.800001E-02
850 INTAC = .062
855 INTAD = .064
860 '
865 PRINT TAB(17) "QTR 1"; TAB(27) "QTR 2"; TAB(37) "QTR 3"
; TAB(47) "QTR 4"
870 PRINT TAB(17) ".076"; TAB(27) ".068"; TAB(37) ".062"; T
AB(47) ".064"
875 PRINT

```

```

880 PRINT
885 PRINT "These are the C-141 intra-theater percentages of
total channel"
890 PRINT "hours for the 22 AF."
895 PRINT
900 INPUT "Do you wish to change any percentages? (1 for Ye
s, 2 for No)" ,LEDZEP
905 PRINT
910 PRINT
915 IF LEDZEP = 1 THEN 920 ELSE 1000
920 '
925 INPUT "What is the C-141 intratheater percentage for th
e 1st quarter?",P1
930 IF P1 = CHR THEN P1 = INTAA
935 IF P1 <> INTAA THEN INTAA = P1
940 PRINT
945 INPUT "What is the C-141 intratheater percentage for th
e 2nd quarter?",P2
950 IF P2 = CHR THEN P2 = INTAB
955 IF P2 <> INTAB THEN INTAB = P2
960 PRINT
965 INPUT "What is the C-141 intratheater percentage for th
e 3rd quarter?",P3
970 IF P3 = CHR THEN P3 = INTAC
975 IF P3 <> INTAC THEN INTAC = P3
980 PRINT
985 INPUT "What is the C-141 intratheater percentage for the
4th quarter?",P4
990 IF P4 = CHR THEN P4 = INTAD
995 IF P4 <> INTAD THEN INTAD = P4
1000 PRINT
1005 PRINT
1010 INTERA = PLANB1 - (PLANB1 * INTAA)
1015 INTERB = PLANB2 - (PLANB2 * INTAB)
1020 INTERC = PLANB3 - (PLANB3 * INTAC)
1025 INTERD = PLANB4 - (PLANB4 * INTAD)
1030 PRINT
1035 PRINT
1040 PRINT
1045 PRINT
1050 DIM PCTB (15,4)
1055 '
1060 DATA .057, .061, .052, .062
1065 DATA .128, .147, .133, .138
1070 DATA 0, 0, .002, .007
1075 DATA 0, 0, .003, .013
1080 DATA 0, 0, .002, .002
1085 DATA .042, .044, .039, .040
1090 DATA .042, .044, .039, .040
1095 DATA 0, 0, .003, .004
1100 DATA 0, 0, .003, .011
1105 DATA 0, 0, .004, .002
1110 DATA .731, .704, .701, .642

```

```

1115 DATA 0, 0, .007, .020
1120 DATA 0, 0, .005, .005
1125 DATA 0, 0, .005, .010
1130 DATA 0, 0, .002, .004
1135 '
1140 FOR X = 1 TO 15
1145     FOR Y = 1 TO 4
1150         READ PCTB (X,Y)
1155     NEXT Y
1160 NEXT X
1165 PRINT
1170 '
1175 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2"; T
AB(37) "QTR 3"; TAB(47) "QTR 4"
1180 PRINT "TCM-ALA"; TAB(17) ".057"; TAB(27) ".061"; TAB(37
) ".052"; TAB(47) ".062"
1185 PRINT "TCM-NPAC"; TAB(17) ".128"; TAB(27) ".147"; TAB(3
7) ".133"; TAB(47) ".138"
1190 PRINT "TCM-DOV-MED"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".002"; TAB(47) ".007"
1195 PRINT "TCM-DOV-M/E"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".003"; TAB(47) ".013"
1200 PRINT "TCM-WRI-MED"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".002"; TAB(47) ".002"
1205 PRINT "SBD-CPAC"; TAB(17) ".042"; TAB(27) ".044"; TAB(3
7) ".039"; TAB(47) ".040"
1210 PRINT "SBD-SPAC"; TAB(17) ".042"; TAB(27) ".044"; TAB(3
7) ".039"; TAB(47) ".040"
1215 PRINT "SBD-DOV-MED"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".003"; TAB(47) ".004"
1220 PRINT "SBD-DOV-M/E"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".003"; TAB(47) ".011"
1225 PRINT "SBD-WRI-MED"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".004"; TAB(47) ".002"
1230 PRINT "SUU-CPAC"; TAB(17) ".731"; TAB(27) ".704"; TAB(3
7) ".701"; TAB(47) ".642"
1235 PRINT "SUU-NPAC"; TAB(17) "0"; TAB(27) "0"; TAB(37) ".0
07"; TAB(47) ".020"
1240 PRINT "SUU-DOV-MED"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".005"; TAB(47) ".005"
1245 PRINT "SUU-DOV-M/E"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".005"; TAB(47) ".010"
1250 PRINT "SUU-WRI-MED"; TAB(17) "0"; TAB(27) "0"; TAB(37)
".002"; TAB(47) ".004"
1255 PRINT
1260 PRINT
1265 PRINT "These are the MAI percentages for 22 AF C-141 ch
annel airlift."
1270 PRINT
1275 INPUT "Do you wish to change any percentages? (1 for Ye
s, 2 for No)",WHO
1280 PRINT
1285 IF WHO = 1 THEN 1290 ELSE 2170

```

```

1290 PRINT
1295 PRINT
1300 INPUT "What is TCM-ALA for the 1st quarter?", ALA1
1305 IF ALA1 = CHR THEN ALA1 = PCTB (1,1)
1310 IF ALA1 <> PCTB (1,1) THEN PCTB (1,1) = ALA1
1315 PRINT
1320 INPUT "What is TCM-NPAC for the 1st quarter?", NPAC11
1325 IF NPAC11 = CHR THEN NPAC11 = PCTB (2,1)
1330 IF NPAC11 <> PCTB (2,1) THEN PCTB (2,1) = NPAC11
1335 PRINT
1340 INPUT "What is SBD-CPAC for the 1st quarter?", CPAC11
1345 IF CPAC11 = CHR THEN CPAC11 = PCTB (6,1)
1350 IF CPAC11 <> PCTB (6,1) THEN PCTB (6,1) = CPAC11
1355 PRINT
1360 INPUT "What is SBD-SPAC for the 1st quarter?", SPAC11
1365 IF SPAC11 = CHR THEN SPAC11 = PCTB (7,1)
1370 IF SPAC11 <> PCTB (7,1) THEN PCTB (7,1) = SPAC11
1375 PRINT
1380 INPUT "What is SUU-CPAC for the 1st quarter?", CPAC111
1385 IF CPAC111 = CHR THEN CPAC111 = PCTB (11,1)
1390 IF CPAC111 <> PCTB (11,1) THEN PCTB (11,1) = CPAC
111
1395
1400 IF PCTB (1,1) + PCTB (2,1) + PCTB (6,1) + PCTB (7,1) +
PCTB (11,1) <> 1 THEN PRINT: PRINT "THE MAI PERCENTAGES FOR T
HE 1ST QUARTER DO NOT SUM TO"; " 1.00.": PRINT "PLEASE ENTER
ALL OF THE 1ST QUARTER PERCENTAGES AGAIN.":GOTO 1295
1405 PRINT
1410 INPUT "What is TCM-ALA for the 2nd quarter?", ALA21
1415 IF ALA21 = CHR THEN ALA21 = PCTB (1,2)
1420 IF ALA21 <> PCTB (1,2) THEN PCTB (1,2) = ALA21
1425 PRINT
1430 INPUT "What is TCM-NPAC for the 2nd quarter?", NPAC21
1435 IF NPAC21 = CHR THEN NPAC21 = PCTB (2,2)
1440 IF NPAC21 <> PCTB (2,2) THEN PCTB (2,2) = NPAC21
1445 PRINT
1450 INPUT "What is SBD-CPAC for the 2nd quarter?", CPAC21
1455 IF CPAC21 = CHR THEN CPAC21 = PCTB (6,2)
1460 IF CPAC21 <> PCTB (6,2) THEN PCTB (6,2) = CPAC21
1465 PRINT
1470 INPUT "What is SBD-SPAC for the 2nd quarter?", SPAC21
1475 IF SPAC21 = CHR THEN SPAC21 = PCTB (7,2)
1480 IF SPAC21 <> PCTB (7,2) THEN PCTB (7,2) = SPAC21
1485 PRINT
1490 INPUT "What is SUU-CPAC for the 2nd quarter?", CPAC221
1495 IF CPAC221 = CHR THEN CPAC221 = PCTB (11,2)
1500 IF CPAC221 <> PCTB (11,2) THEN PCTB (11,2) = CPAC
221
1505 PRINT
1510 SUM2 = PCTB (1,2) + PCTB (2,2) + PCTB (6,2) + PCTB (7,2
) + PCTB (11,2)
1515 IF SUM2 <> 1 THEN PRINT: PRINT "THE MAI PERCENTAGES FOR
THE 2ND QUARTER DO NOT SUM TO 1.00." : PRINT "PLEASE ENTER A

```

```

LL OF THE 2ND QUARTER PERCENTAGES AGAIN." : GOTO 1405
1520 PRINT
1525 INPUT "What is TCM-ALA for the 3rd quarter?", ALA31
1530 IF ALA31 = CHR THEN ALA31 = PCTB (1,3)
1535 IF ALA31 <> PCTB (1,3) THEN PCTB (1,3) = ALA31
1540 PRINT
1545 INPUT "What is TCM-NPAC for the 3rd quarter?", NPAC31
1550 IF NPAC31 = CHR THEN NPAC31 = PCTB (2,3)
1555 IF NPAC31 <> PCTB (2,3) THEN PCTB (2,3) = NPAC31
1560 PRINT
1565 INPUT "What is TCM-DOV-MED for the 3rd quarter?", TMED1
1570 IF TMED1 = CHR THEN TMED1 = PCTB (3,3)
1575 IF TMED1 <> PCTB (3,3) THEN PCTB (3,3) = TMED1
1580 PRINT
1585 INPUT "What is TCM-DOV-M/E for the 3rd quarter?", TME
1590 IF TME = CHR THEN TME = PCTB (4,3)
1595 IF TME <> PCTB (4,3) THEN PCTB (4,3) = TME
1600 PRINT
1605 INPUT "What is TCM-WRI-MED for the 3rd quarter?", TWMED
1610 IF TWMED = CHR THEN TWMED = PCTB (5,3)
1615 IF TWMED <> PCTB (5,3) THEN PCTB (5,3) = TWMED
1620 PRINT
1625 INPUT "What is SBD-CPAC for the 3rd quarter?", CPAC31
1630 IF CPAC31 = CHR THEN CPAC31 = PCTB (6,3)
1635 IF CPAC31 <> PCTB (6,3) THEN PCTB (6,3) = CPAC31
1640 PRINT
1645 INPUT "What is SBD-SPAC for the 3rd quarter?", SPAC31
1650 IF SPAC31 = CHR THEN SPAC31 = PCTB (7,3)
1655 IF SPAC31 <> PCTB (7,3) THEN PCTB (7,3) = SPAC31
1660 PRINT
1665 INPUT "What is SBD-DOV-MED for the 3rd quarter?", SMED
1670 IF SMED = CHR THEN SMED = PCTB (8,3)
1675 IF SMED <> PCTB (8,3) THEN PCTB (8,3) = SMED
1680 PRINT
1685 INPUT "What is SBD-DOV-M/E for the 3rd quarter?", SME
1690 IF SME = CHR THEN SME = PCTB (9,3)
1695 IF SME <> PCTB (9,3) THEN PCTB (9,3) = SME
1700 PRINT
1705 INPUT "What is SBD-WRI-MED for the 3rd quarter?", SWMED
1710 IF SWMED = CHR THEN SWMED = PCTB (10,3)
1715 IF SWMED <> PCTB (10,3) THEN PCTB (10,3) = SWMED
1720 PRINT
1725 INPUT "What is SUU-CPAC for the 3rd quarter?", SCPAC
1730 IF SCPAC = CHR THEN SCPAC = PCTB (11,3)
1735 IF SCPAC <> PCTB (11,3) THEN PCTB (11,3) = SCPAC
1740 PRINT
1745 INPUT "What is SUU-NPAC for the 3rd quarter?", SNPAC
1750 IF SNPAC = CHR THEN SNPAC = PCTB (12,3)
1755 IF SNPAC <> PCTB (12,3) THEN PCTB (12,3) = SNPAC
1760 PRINT
1765 INPUT "What is SUU-DOV-MED for the 3rd quarter?", SMED1
1770 IF SMED1 = CHR THEN SMED1 = PCTB (13,3)
1775 IF SMED1 <> PCTB (13,3) THEN PCTB (13,3) = SMED1

```

```

1780 PRINT
1785 INPUT "What is SUU-DOV-M/E for the 3rd quarter?", SME1
1790 IF SME1 = CHR THEN SME1 = PCTB (14,3)
1795 IF SME1 <> PCTB (14,3) THEN PCTB (14,3) = SME1
1800 PRINT
1805 INPUT "What is SUU-WRI-MED for the 3rd quarter?", SWMED
1
1810 IF SWMED1 = CHR THEN SWMED1 = PCTB (15,3)
1815 IF SWMED1 <> PCTB (15,3) THEN PCTB (15,3) = SWMED
1
1820 PRINT
1825 SUMA = PCTB (1,3) + PCTB (2,3) + PCTB (3,3) + PCTB (4,3
) + PCTB (5,3)
1830 SUMB = PCTB (6,3) + PCTB (7,3) + PCTB (8,3) + PCTB (9,3
) + PCTB (10,3)
1835 SUMC = PCTB (11,3) + PCTB (12,3) + PCTB (13,3) + PCTB (
14,3) + PCTB (15,3)
1840 IF SUMA + SUMB + SUMC <> 1 THEN PRINT : PRINT "THE MAI
PERCENTAGES FOR THE 3RD QUARTER DO NOT SUM TO 1.00." : PRINT
"PLEASE ENTER ALL OF THE 3RD QUARTER PERCENTAGES AGAIN.": GOT
O 1520
1845 PRINT
1850 INPUT "What is TCM-ALA for the 4th quarter?", ALA41
1855 IF ALA41 = CHR THEN ALA41 = PCTB (1,4)
1860 IF ALA41 <> PCTB (1,4) THEN PCTB (1,4) = ALA41
1865 PRINT
1870 INPUT "What is TCM-NPAC for the 4th quarter?", NPAC41
1875 IF NPAC41 = CHR THEN NPAC41 = PCTB (2,4)
1880 IF NPAC41 <> PCTB (2,4) THEN PCTB (2,4) = NPAC41
1885 PRINT
1890 INPUT "What is TCM-DOV-MED for the 4th quarter?", TMED4
1895 IF TMED4 = CHR THEN TMED4 = PCTB (3,4)
1900 IF TMED4 <> PCTB (3,4) THEN PCTB (3,4) = TMED4
1905 PRINT
1910 INPUT "What is TCM-DOV-M/E for the 4th quarter?", TME4
1915 IF TME4 = CHR THEN TME4 = PCTB (4,4)
1920 IF TME4 <> PCTB (4,4) THEN PCTB (4,4) = TME4
1925 PRINT
1930 INPUT "What is TCM-WRI-MED for the 4th quarter?", TDM
1935 IF TDM = CHR THEN TDM = PCTB (5,4)
1940 IF TDM <> PCTB (5,4) THEN PCTB (5,4) = TDM
1945 PRINT
1950 INPUT "What is SBD-CPAC for the 4th quarter?", TSC
1955 IF TSC = CHR THEN TSC = PCTB (6,4)
1960 IF TSC <> PCTB (6,4) THEN PCTB (6,4) = TSC
1965 PRINT
1970 INPUT "What is SBD-SPAC for the 4th quarter?", TSS
1975 IF TSS = CHR THEN TSS = PCTB (7,4)
1980 IF TSS <> PCTB (7,4) THEN PCTB (7,4) = TSS
1985 PRINT
1990 INPUT "What is SBD-DOV-MED for the 4th quarter?", SDM
1995 IF SDM = CHR THEN SDM = PCTB (8,4)
2000 IF SDM <> PCTB (8,4) THEN PCTB (8,4) = SDM

```

```

2005 PRINT
2010 INPUT "What is SBD-DOV-M/E for the 4th quarter?", SEM
2015 IF SEM = CHR THEN SEM = PCTB (9,4)
2020 IF SEM <> PCTB (9,4) THEN PCTB (9,4) = SEM
2025 PRINT
2030 INPUT "What is SBD-WRI-MED for the 4th quarter?", MIR
2035 IF MIR = CHR THEN MIR = PCTB (10,4)
2040 IF MIR = PCTB (10,4) THEN PCTB (10,4) = MIR
2045 PRINT
2050 INPUT "What is SUU-CPAC for the 4th quarter?", PACE
2055 IF PACE = CHR THEN PACE = PCTB (11,4)
2060 IF PACE = PCTB (11,4) THEN PCTB (11,4) = PACE
2065 PRINT
2070 INPUT "What is SUU-NPAC for the 4th quarter?", ZEP
2075 IF ZEP = CHR THEN ZEP = PCTB (12,4)
2080 IF ZEP <> PCTB (12,4) THEN PCTB (12,4) = ZEP
2085 PRINT
2090 INPUT "What is SUU-DOV-MED for the 4th quarter?", ZEPE
2095 IF ZEPE = CHR THEN ZEPE = PCTB (13,4)
2100 IF ZEPE <> PCTB (13,4) THEN PCTB (13,4) = ZEPE
2105 PRINT
2110 INPUT "What is SUU-DOV-M/E for the 4th quarter?", ZAT
2115 IF ZAT = CHR THEN ZAT = PCTB (14,4)
2120 IF ZAT <> PCTB (14,4) THEN PCTB (14,4) = ZAT
2125 PRINT
2130 INPUT "What is SUU-WRI-MED for the 4th quarter?", ZATE
2135 IF ZATE = CHR THEN ZATE = PCTB (15,4)
2140 IF ZATE <> PCTB (15,4) THEN PCTB (15,4) = ZATE
2145 PRINT
2150 SUMD = PCTB (1,4) + PCTB (2,4) + PCTB (3,4) + PCTB (4,4)
) + PCTB (5,4)
2155 SUME = PCTB (6,4) + PCTB (7,4) + PCTB (8,4) + PCTB (9,4)
) + PCTB (10,4)
2160 SUMF = PCTB (11,4) + PCTB (12,4) + PCTB (13,4) + PCTB (
14,4) + PCTB (15,4)
2165 IF SUMD + SUME + SUMF <> 1 THEN PRINT : PRINT "THE MAI
PERCENTAGES FOR THE 4TH QUARTER DO NOT SUM TO 1.00." : PRINT
"PLEASE ENTER ALL OF THE 4TH QUARTER PERCENTAGES AGAIN.": GOT
O 1845
2170 DIM AVGB(15,4), FLYB(15,4), NUMB(15,4), CAPB(15,4)
2175 '
2180 DATA 15.92, 16.84, 15.84, 15.80
2185 DATA 36.31, 34.94, 32.96, 37.08
2190 DATA 1, 1, 39.42, 38.72
2195 DATA 1, 1, 44.92, 44.00
2200 DATA 1, 1, 33.83, 33.83
2205 DATA 48.17, 48.07, 50.20, 50.58
2210 DATA 48.17, 48.07, 50.20, 50.58
2215 DATA 1, 1, 39.42, 37.92
2220 DATA 1, 1, 44.00, 43.88
2225 DATA 1, 1, 33.83, 33.83
2230 DATA 47.65, 44.24, 43.22, 41.84
2235 DATA 1, 1, 29.21, 28.65

```

```

2240 DATA 1, 1, 37.67, 38.17
2245 DATA 1, 1, 44.42, 43.73
2250 DATA 1, 1, 33.83, 33.83
2255 '
2260 FOR X = 1 TO 15
2265     FOR Y = 1 TO 4
2270         READ AVGB (X,Y)
2275         FLYB (X,1) = INTERA * PCTB (X,1)
2280         FLYB (X,2) = INTERB * PCTB (X,2)
2285         FLYB (X,3) = INTERC * PCTB (X,3)
2290         FLYB (X,4) = INTERD * PCTB (X,4)
2295         NUMB (X,Y) = CINT(FLYB(X,Y)/AVGB(X,Y))
2300         CAPB (X,Y) = NUMB (X,Y) * 18
2305     NEXT Y
2310 NEXT X
2315 PRINT
2320 PRINT
2325 PRINT
2330 PRINT
2335 '
2340 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2"; T
AB(37) "QTR 3"; TAB(47) "QTR 4"
2345 PRINT "TCM-ALA"; TAB(17) CAPB (1,1); TAB(27) CAPB (1,2)
; TAB(37) CAPB (1,3); T
AB(47) CAPB (1,4)
2350 PRINT "TCM-NPAC"; TAB(17) CAPB (2,1); TAB(27) CAPB (2,2)
); TAB(37) CAPB (2,3); T
AB(47) CAPB (2,4)
2355 PRINT "TCM-DOV-MED"; TAB(17) CAPB (3,1); TAB(27) CAPB (
3,2); TAB(37) CAPB (3,3); T
AB(47) CAPB (3,4)
2360 PRINT "TCM-DOV-M/E"; TAB(17) CAPB (4,1); TAB(27) CAPB (
4,2); TAB(37) CAPB (4,3); T
AB(47) CAPB (4,4)
2365 PRINT "TCM-WRI-MED"; TAB(17) CPAB (5,1); TAB(27) CAPB (
5,2); TAB(37) CAPB (5,3); T
AB(47) CAPB (5,4)
2370 PRINT "SBD-CPAC"; TAB(17) CAPB (6,1); TAB(27) CAPB (6,2)
); TAB(37) CAPB (6,3);
TAB(47) CAPB (6,4)
2375 PRINT "SBD-SPAC"; TAB(17) CAPB (7,1); TAB(27) CAPB (7,2)
); TAB(37) CAPB (7,3);
TAB(47) CAPB (7,4)
2380 PRINT "SBD-DOV-MED"; TAB(17) CAPB (8,1); TAB(27) CAPB (
8,2); TAB(37) CAPB (8,3);
TAB(47) CAPB (8,4)
2385 PRINT "SBD-DOV-M/E"; TAB(17) CAPB (9,1); TAB(27) CAPB (
9,2); TAB(37) CAPB (9,3);
TAB(47) CAPB (9,4)
2390 PRINT "SBD-WRI-MED"; TAB(17) CAPB (10,1); TAB(27) CAPB
(10,2); TAB(37) CAPB (10,3);
TAB(47) CAPB (10,4)
2395 PRINT "SUU-CPAC"; TAB(17) CAPB (11,1); TAB(27) CAPB (11

```

```

,2);
TAB(47) CAPB (11,4)
2400 PRINT "SUU-NPAC"; TAB(17) CAPB (12,1); TAB(27) CAPB (12
,2);
TAB(37) CAPB (12,3
); TAB(47) CAPB (12,4)
2405 PRINT "SUU-DOV-MED"; TAB(17) CAPB (13,1); TAB(27) CAPB
(13,2);
TAB(37) CAPB (13,3);
TAB(47) CAPB (13,4)
2410 PRINT "SUU-DOV-M/E"; TAB(17) CAPB (14,1); TAB(27) CAPB
(14,2);
TAB(37) CAPB (14,3)
; TAB(47) CAPB (14,4)
2415 PRINT "SUU-WRI-MED"; TAB(17) CAPB (15,1); TAB(27) CAPB
(15,2);
TAB(37) CAPB (15,3)
; TAB(47) CAPB (15,4)
2420 PRINT
2425 PRINT
2430 PRINT "The above figures are the C-141 channel airlift
capability expressed in tons forthe 22 AF."
2435 PRINT
2440 INPUT "When you are ready to continue, hit any key.",CC
R
2445 PRINT
2450 PRINT
2455 PRINT
2460 PRINT
2465 PRINT "Now it's time to calculate either a surplus or d
eficit of airlift capability foreach MAI in 22 AF."
2470 PRINT
2475 PRINT
2480 PRINT
2485 INPUT "What is the TCM-ALA forecast for the 1st quarter
?", FORE1
2490 PRINT
2495 INPUT "What is the TCM-ALA forecast for the 2nd quarter
?", FORE2
2500 PRINT
2505 INPUT "What is the TCM-ALA forecast for the 3rd quarter
?", FORE3
2510 PRINT
2515 INPUT "What is the TCM-ALA forecast for the 4th quarter
?", FORE4
2520 PRINT
2525 INPUT "What is the TCM-NPAC forecast for the 1st quarte
r?", FORE5
2530 PRINT
2535 INPUT "What is the TCM-NPAC forecast for the 2nd quarte
r?", FORE6
2540 PRINT
2545 INPUT "What is the TCM-NPAC forecast for the 3rd quarte
r?", FORE7
2550 PRINT
2555 INPUT "What is the TCM-NPAC forecast for the 4th quarte
r?", FORE8

```

```

2560 PRINT
2565 INPUT "What is the SBD-CPAC forecast for the 1st quarter?", FORE9
2570 PRINT
2575 INPUT "What is the SBD-CPAC forecast for the 2nd quarter?", FORE10
2580 PRINT
2585 INPUT "What is the SBD-CPAC forecast for the 3rd quarter?", FORE11
2590 PRINT
2595 INPUT "What is the SBD-CPAC forecast for the 4th quarter?", FORE12
2600 PRINT
2605 INPUT "What is the SBD-SPAC forecast for the 1st quarter?", FORE13
2610 PRINT
2615 INPUT "What is the SBD-SPAC forecast for the 2nd quarter?", FORE14
2620 PRINT
2625 INPUT "What is the SBD-SPAC forecast for the 3rd quarter?", FORE15
2630 PRINT
2635 INPUT "What is the SBD-SPAC forecast for the 4th quarter?", FORE16
2640 PRINT
2645 INPUT "What is the SUU-CPAC forecast for the 1st quarter?", FORE17
2650 PRINT
2655 INPUT "What is the SUU-CPAC forecast for the 2nd quarter?", FORE18
2660 PRINT
2665 INPUT "What is the SUU-CPAC forecast for the 3rd quarter?", FORE19
2670 PRINT
2675 INPUT "What is the SUU-CPAC forecast for the 4th quarter?", FORE20
2680 PRINT
2685 INPUT "What is the SUU-NPAC forecast for the 1st quarter?", FORE21
2690 PRINT
2695 INPUT "What is the SUU-NPAC forecast for the 2nd quarter?", FORE22
2700 PRINT
2705 INPUT "What is the SUU-NPAC forecast for the 3rd quarter?", FORE23
2710 PRINT
2715 INPUT "What is the SUU-NPAC forecast for the 4th quarter?", FORE24
2720 PRINT
2725 PRINT
2730 PRINT
2735 PRINT
2740 TCM11 = CAPB(1,1) - FORE1 : TCM12 = CAPB(1,2) - FORE2

```

```

2745 TCM13 = CAPB(1,3) - FORE3 : TCM14 = CAPB(1,4) - FORE4
2750 '
2755 TCM21 = CAPB(2,1) - FORE5 : TCM22 = CAPB(2,2) - FORE6
2760 TCM23 = CAPB(2,3) - FORE7 : TCM24 = CAPB(2,4) - FORE8
2765 '
2770 SBD11 = CAPB(6,1) - FORE9 : SBD12 = CAPB(6,2) - FORE10
2775 SBD13 = CAPB(6,3) - FORE11 : SBD14 = CAPB(6,4) - FORE12
2780 '
2785 SBD21 = CAPB(7,1) - FORE13 : SBD22 = CAPB(7,2) - FORE14
2790 SBD23 = CAPB(7,3) - FORE15 : SBD24 = CAPB(7,4) - FORE16
2795 '
2800 SUU11 = CAPA(1,1) + CAPB(11,1) - FORE17
2805 SUU12 = CAPA(1,2) + CAPB(11,2) - FORE18
2810 SUU13 = CAPA(1,3) + CAPB(11,3) - FORE19
2815 SUU14 = CAPA(1,4) + CAPB(11,4) - FORE20
2820 '
2825 SUU21 = CAPA(2,1) + CAPB(12,1) - FORE21
2830 SUU22 = CAPA(2,2) + CAPB(12,2) - FORE22
2835 SUU23 = CAPA(2,3) + CAPB(12,3) - FORE23
2840 SUU24 = CAPA(2,4) + CAPB(12,4) - FORE24
2845 PRINT
2850 PRINT
2855 PRINT
2860 PRINT
2865 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2";
      TAB(37) "QTR 3";
      TAB(47) "QTR 4"
2870 PRINT "TCM-ALA"; TAB(17) TCM11; TAB(27) TCM12; TAB(37)
TCM13; TAB(47) TCM14
2875 PRINT "TCM-NPAC"; TAB(17) TCM21; TAB(27) TCM22; TAB(37)
TCM23; TAB(47) TCM24
2880 PRINT "SBD-CPAC"; TAB(17) SBD11; TAB(27) SBD12; TAB(37)
SBD13; TAB(47) SBD14
2885 PRINT "SBD-SPAC"; TAB(17) SBD21; TAB(27) SBD22; TAB(37)
SBD23; TAB(47) SBD24
2890 PRINT "SUU-CPAC"; TAB(17) SUU11; TAB(27) SUU12; TAB(37)
SUU13; TAB(47) SUU14
2895 PRINT "SUU-NPAC"; TAB(17) SUU21; TAB(27) SUU22; TAB(37)
SUU23; TAB(47) SUU24
2900 PRINT
2905 PRINT
2910 PRINT "The positive numbers above indicate a potential
surplus while the negative numbers indicate a potential
deficit of airlift capability."
2915 PRINT
2920 INPUT "Do you wish to print the table above? (1 for yes
, 2 for no)", DOOB
2925 IF DOOB = 1 THEN 2935 ELSE 2980
2930 PRINT
2935 LPRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2";
      TAB(37) "QTR 3"
; TAB(47) "QTR 4"
2940 LPRINT "TCM-ALA"; TAB(17) TCM11; TAB(27) TCM12;

```

```

TAB(37) TCM13; TAB
(47) TCM14
2945 LPRINT "TCM-NPAC"; TAB(17) TCM21; TAB(27) TCM22;
TAB(37) TCM23; TA
B(47) TCM24
2950 LPRINT "SBD-CPAC"; TAB(17) SBD11; TAB(27) SBD12;
TAB(37) SBD13; TA
B(47) SBD14
2955 LPRINT "SBD-SPAC"; TAB(17) SBD21; TAB(27) SBD22;
TAB(37) SBD23; TA
B(47) SBD24
2960 LPRINT "SUU-CPAC"; TAB(17) SUU11; TAB(27) SUU12;
TAB(37) SUU13; TA
B(47) SUU14
2965 LPRINT "SUU-NPAC"; TAB(17) SUU21; TAB(27) SUU22;
TAB(37) SUU23; TA
B(47) SUU24
2970 LPRINT
2975 LPRINT "The positive numbers above indicate a potential
surplus while the negative numbers indicate a potential defi
cit of airlift capability."
2980 PRINT
2985 PRINT
2990 PRINT
2995 PRINT
3000 INPUT "Do you wish to calculate airlift capability for
the 21 AF? (1 for yes, 2 for No)",ALL
3005 '
3010 IF ALL = 1 THEN 3015 ELSE 7370
3015 PRINT
3020 PRINT
3025 PRINT
3030 PRINT
3035 INPUT "What are the 21 AF C-5 planned channel hours for
the 1st quarter?" , PLANC1
3040 PRINT
3045 PRINT
3050 INPUT "What are the 21 AF C-5 planned channel hours for
the 2nd quarter?" , PLANC2
3055 PRINT
3060 PRINT
3065 INPUT "What are the 21 AF C-5 planned channel hours for
the 3rd quarter?" , PLANC3
3070 PRINT
3075 PRINT
3080 INPUT "What are the 21 AF C-5 planned channel hours for
the 4th quarter?" , PLANC4
3085 '
3090 '
3095 '
3100 '
3105 '
3110 '

```

```

3115 DIM PCTC(6,4)
3120 '
3125 DATA .273, .254, .345, .366
3130 DATA .218, .231, .244, .341
3135 DATA .377, .370, .232, .124
3140 DATA .132, .145, .152, .130
3145 DATA 0, 0, .019, .039
3150 DATA 0, 0, .008, 0
3155 '
3160 PRINT
3165 PRINT
3170 FOR X = 1 TO 6
3175     FOR Y = 1 TO 4
3180         READ PCTC(X,Y)
3185     NEXT Y
3190 NEXT X
3195 '
3200 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2";
                                     TAB(37) "QTR 3";
      TAB(47) "QTR 4"
3205 PRINT "DOV-GER"; TAB(17) ".273"; TAB(27) ".254"; TAB(37)
) ".345"; TAB(47) ".366"
3210 PRINT "DOV-MED"; TAB(17) ".218"; TAB(27) ".231"; TAB(37)
) ".244"; TAB(47) ".341"
3215 PRINT "DOV-M/E"; TAB(17) ".377"; TAB(27) ".370"; TAB(37)
) ".232"; TAB(47) ".124"
3220 PRINT "NGU-MED"; TAB(17) ".132"; TAB(27) ".145"; TAB(37)
) ".152"; TAB(47) ".130"
3225 PRINT "CHS-C/S"; TAB(17) "0"; TAB(27) "0"; TAB(37) ".01
9"; TAB(47) ".039"
3230 PRINT "COF-AFR"; TAB(17) "0"; TAB(27) "0"; TAB(37) ".00
8"; TAB(47) "0"
3235 PRINT
3240 PRINT
3245 PRINT "These are the MAI percentages for the 21 AF C-5
channel airlift."
3250 PRINT
3255 INPUT "Do you wish to change any percentages? (1 for Ye
s, 2 for No)",BB
3260 '
3265     IF BB = 1 THEN 3275 ELSE 3705
3270 '
3275 PRINT
3280 INPUT "What is DOV-GER for the 1st quarter?", JAM1
3285     IF JAM1 = CHR THEN JAM1 = PCTC (1,1)
3290     IF JAM1 <> PCTC (1,1) THEN PCTC (1,1) = JAM1
3295 PRINT
3300 INPUT "What is DOV-MED for the 1st quarter?", LAM1
3305     IF LAM1 = CHR THEN LAM1 = PCTC (2,1)
3310     IF LAM1 <> PCTC (2,1) THEN PCTC (2,1) = LAM1
3315 PRINT
3320 INPUT "What is DOV-M/E for the 1st quarter?", BAM1
3325     IF BAM1 = CHR THEN BAM1 = PCTC (3,1)

```

```

3330     IF BAM1 <> PCTC (3,1) THEN PCTC (3,1) = BAM1
3335 PRINT
3340 INPUT "What is NGU-MED for the 1st quarter?", CAM1
3345     IF CAM1 = CHR THEN CAM1 = PCTC (4,1)
3350     IF CAM1 <> PCTC (4,1) THEN PCTC (4,1) = CAM1
3355
3360 IF PCTC (1,1) + PCTC (2,1) + PCTC (3,1) + PCTC (4,1) <>
  1 THEN PRINT: PRINT "THE MAI PERCENTAGES FOR THE 1ST QUARTER
DO NOT SUM TO 1.00": PRINT "PLEASE ENTER ALL OF THE 1ST QUAR
TER PERCENTAGES AGAIN." : GOTO 3275
3365 PRINT
3370 INPUT "What is DOV-GER for the 2nd quarter?", JAM2
3375     IF JAM2 = CHR THEN JAM2 = PCTC (1,2)
3380     IF JAM2 <> PCTC (1,2) THEN PCTC (1,2) = JAM2
3385 PRINT
3390 INPUT "What is DOV-MED for the 2nd quarter?", LAM2
3395     IF LAM2 = CHR THEN LAM2 = PCTC (2,2)
3400     IF LAM2 <> PCTC (2,2) THEN PCTC (2,2) = LAM2
3405 PRINT
3410 INPUT "What is DOV-M/E for the 2nd quarter?", BAM2
3415     IF BAM2 = CHR THEN BAM2 = PCTC (3,2)
3420     IF BAM2 <> PCTC (3,2) THEN PCTC (3,2) = BAM2
3425 PRINT
3430 INPUT "What is NGU-MED for the 2nd quarter?", CAM2
3435     IF CAM2 = CHR THEN CAM2 = PCTC (4,2)
3440     IF CAM2 <> PCTC (4,2) THEN PCTC (4,2) = CAM2
3445
3450 SUMZ = PCTC(1,3) + PCTC(2,3) + PCTC(3,3) + PCTC(4,3) +
PCTC(5,3) + PCTC(6,3)
3455 IF PCTC (1,2) + PCTC (2,2) + PCTC (3,2) + PCTC (4,2) <>
  1 THEN PRINT:PRINT "THE MAI PERCENTAGES FOR THE 2ND QUARTER
DO NOT SUM TO 1.00.": PRINT "PLEASE ENTER ALL OF T
HE 2ND QUARTER PERCENTAGES AGAIN." : GOTO 3365
3460 PRINT
3465 INPUT "What is DOV-GER for the 3rd quarter?", JAM3
3470     IF JAM3 = CHR THEN JAM3 = PCTC (1,3)
3475     IF JAM3 <> PCTC (1,3) THEN PCTC (1,3) = JAM3
3480 PRINT
3485 INPUT "What is DOV-MED for the 3rd quarter?", LAM3
3490     IF LAM3 = CHR THEN LAM3 = PCTC (2,3)
3495     IF LAM3 <> PCTC (2,3) THEN PCTC (2,3) = LAM3
3500 PRINT
$INCLUDE "B:THESIS1B.BAS"

```

```

3505 INPUT "What is DOV-M/E for the 3rd quarter?", BAM3
3510     IF BAM3 = CHR THEN BAM3 = PCTC (3,3)
3515     IF BAM3 <> PCTC (3,3) THEN PCTC (3,3) = BAM3
3520 PRINT
3525 INPUT "What is NGU-MED for the 3rd quarter?", CAM3
3530     IF CAM3 = CHR THEN CAM3 = PCTC (4,3)
3535     IF CAM3 <> PCTC (4,3) THEN PCTC (4,3) = CAM3
3540 PRINT
3545 INPUT "What is CHS-C/S for the 3rd quarter?", RAM3
3550     IF RAM3 = CHR THEN RAM3 = PCTC (5,3)
3555     IF RAM3 <> PCTC (5,3) THEN PCTC (5,3) = RAM3
3560 PRINT
3565 INPUT "What is COF-AFR for the 3rd quarter?", DAM3
3570     IF DAM3 = CHR THEN DAM3 = PCTC (6,3)
3575     IF DAM3 <> PCTC (6,3) THEN PCTC (6,3) = DAM3
3580 '
3585 SUMZ = PCTC(1,3) + PCTC(2,3) + PCTC(3,3) + PCTC(4,3) +
PCTC (5,3) + PCTC(6,3)
3590 IF SUMZ <> 1 THEN PRINT:PRINT "THE MAI PERCENTAGES FOR
THE 3RD QUARTER DO NOT SUM TO 1.00.":PRINT "PLEASE ENTER ALL
OF THE 3RD QUARTER PERCENTAGES AGAIN.":GOTO 3460
3595 PRINT
3600 INPUT "What is DOV-GER for the 4th quarter?", JAM4
3605     IF JAM4 = CHR THEN JAM4 = PCTC (1,4)
3610     IF JAM4 <> PCTC (1,4) THEN PCTC (1,4) = JAM4
3615 PRINT
3620 INPUT "What is DOV-MED for the 4th quarter?", LAM4
3625     IF LAM4 = CHR THEN LAM4 = PCTC (2,4)
3630     IF LAM4 <> PCTC (2,4) THEN PCTC (2,4) = LAM4
3635 PRINT
3640 INPUT "What is DOV-M/E for the 4th quarter?", BAM4
3645     IF BAM4 = CHR THEN BAM4 = PCTC (3,4)
3650     IF BAM4 <> PCTC (3,4) THEN PCTC (3,4) = BAM4
3655 PRINT
3660 INPUT "What is NGU-MED for the 4th quarter?", CAM4
3665     IF CAM4 = CHR THEN CAM4 = PCTC (4,4)
3670     IF CAM4 <> PCTC (4,4) THEN PCTC (4,4) = CAM4
3675 PRINT
3680 INPUT "What is CHS-C/S for the 4th quarter?", RAM4
3685     IF RAM4 = CHR THEN RAM4 = PCTC (5,4)
3690     IF RAM4 <> PCTC (5,4) THEN PCTC (5,4) = RAM4
3695 '
3700 IF PCTC(1,4) + PCTC(2,4) + PCTC(3,4) + PCTC(4,4) + PCTC
(5,4) <> 1 THEN PRINT:PRINT "THE MAI PERCENTAGES FOR THE 4TH
QUARTER DO NOT SUM TO 1.00.": PRINT "PLEASE ENTER ALL OF THE
4TH QUARTER PERCENTAGES AGAIN.":GOTO 3595
3705 '
3710 DIM AVGC(6,4), FLYC(6,4), NUMC(6,4), CAPC(6,4)
3715 '
3720 DATA 17.30, 17.30, 17.39, 17.33
3725 DATA 27.15, 27.18, 25.85, 24.41
3730 DATA 32.03, 31.92, 32.05, 32.17
3735 DATA 32.83, 32.83, 32.14, 31.30

```

```

3740 DATA      1,      1, 12.33, 18.54
3745 DATA      1,      1, 27.00,  1
3750
3755 FOR X = 1 TO 6
3760     FOR Y = 1 TO 4
3765         READ AVGC(X,Y)
3770         FLYC (X,1) = PLANC1 * PCTC (X,1)
3775         FLYC (X,2) = PLANC2 * PCTC (X,2)
3780         FLYC (X,3) = PLANC3 * PCTC (X,3)
3785         FLYC (X,4) = PLANC4 * PCTC (X,4)
3790         NUMC (X,Y) = CINT(FLYC(X,Y)/AVGC(X,Y))
3795         CAPC (X,Y) = NUMC (X,Y) * 50
3800     NEXT Y
3805 NEXT X
3810 PRINT
3815 PRINT
3820 PRINT
3825 PRINT
3830
3835 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2";
           TAB(37) "QTR 3";
           TAB(47) "QTR 4"
3840 PRINT "DOV-GER"; TAB(17) CAPC (1,1); TAB(27) CAPC (1,2)
           TAB(37) CAPC (1,3);
           TAB(47) CAPC (1,4)
3845 PRINT "DOV-MED"; TAB(17) CAPC (2,1); TAB(27) CAPC (2,2)
           TAB(37) CAPC (2,3);
           TAB(47) CAPC (2,4)
3850 PRINT "DOV-M/E"; TAB(17) CAPC (3,1); TAB(27) CAPC (3,2)
           TAB(37) CAPC (3,3);
           TAB(47) CAPC (3,4)
3855 PRINT "NGU-MED"; TAB(17) CAPC (4,1); TAB(27) CAPC (4,2)
           TAB(37) CAPC (4,3);
           TAB(47) CAPC (4,4)
3860 PRINT "CHS-C/S"; TAB(17) CAPC (5,1); TAB(27) CAPC (5,2)
           TAB(37) CAPC (5,3);
           TAB(47) CAPC (5,4)
3865 PRINT "COF-AFR"; TAB(17) CAPC (6,1); TAB(27) CAPC (6,2)
           TAB(37) CAPC (6,3);
           TAB(47) CAPC (6,4)
3870 PRINT
3875 PRINT
3880 PRINT "The above figures are the C-5 channel airlift ca
pability expressed in tons for the 21 AF."
3885 PRINT
3890 PRINT
3895 PRINT
3900 PRINT
3905 INPUT "What are the 21 AF C-141 planned channel hours fo
r the 1st quarter?" ,PLAND1
3910 PRINT
3915 PRINT
3920 INPUT "What are the 21 AF C-141 planned channel hours fo

```

```

r the 2nd quarter?" ,PLAND2
3925 PRINT
3930 PRINT
3935 INPUT"What are the 21 AF C-141 planned channel hours fo
r the 3rd quarter?" ,PLAND3
3940 PRINT
3945 PRINT
3950 INPUT"What are the 21 AF C-141 planned channel hours fo
r the 4th quarter?" ,PLAND4
3955 PRINT
3960 PRINT
3965 PRINT
3970 PRINT
3975 INTAE = .018
3980 INTAF = .018
3985 INTAG = .015
3990 INTAH = .02
3995 '
4000 PRINT TAB(17) "QTR 1"; TAB(27) "QTR 2"; TAB(37) "QTR 3"
; TAB(47) "QTR 4"
4005 PRINT TAB(17) ".018"; TAB(27) ".018"; TAB(37) ".015"; T
AB(47) ".020"
4010 PRINT
4015 PRINT
4020 PRINT "These are the C-141 intra-theater percentages of
total channel"
4025 PRINT "hours for the 21 AF."
4030 PRINT
4035 INPUT "Do you wish to change any percentages? (1 for Ye
s, 2 for No)" ,ELTON
4040 PRINT
4045 PRINT
4050 IF ELTON = 1 THEN 4055 ELSE 4140
4055 '
4060 INPUT "What is the C-141 intratheater percentage for th
e 1st quarter?",P5
4065 IF P5 = CHR THEN P5 = INTAE
4070 IF P5 <> INTAE THEN INTAE = P5
4075 PRINT
4080 INPUT "What is the C-141 intratheater percentage for th
e 2nd quarter?",P6
4085 IF P6 = CHR THEN P5 = INTAF
4090 IF P6 <> INTAF THEN INTAF = P6
4095 PRINT
4100 INPUT "What is the C-141 intratheater percentage for th
e 3rd quarter?",P7
4105 IF P7 = CHR THEN P7 = INTAG
4110 IF P7 <> INTAG THEN INTAG = P7
4115 PRINT
4120 INPUT "What is the C-141 intratheater percentage for th
e 4th quarter?",P8
4125 IF P8 = CHR THEN P8 = INTAH
4130 IF P8 <> INTAH THEN INTAH = P8

```

```

4135 PRINT
4140 PRINT
4145 INTERE = PLAND1 - (PLAND1 * INTAE)
4150 INTERF = PLAND2 - (PLAND2 * INTAF)
4155 INTERG = PLAND3 - (PLAND3 * INTAG)
4160 INTERH = PLAND4 - (PLAND4 * INTAH)
4165 PRINT
4170 PRINT
4175 PRINT
4180 PRINT
4185 DIM PCTD (16,4)
4190 '
4195 DATA .066, .053, .044, .050
4200 DATA .108, .074, .049, .011
4205 DATA .014, .014, .014, .016
4210 DATA .092, .093, .094, .108
4215 DATA .160, .203, .212, .217
4220 DATA .076, .071, .076, .090
4225 DATA .019, .016, .016, .018
4230 DATA .006, .006, .005, .007
4235 DATA .047, .047, .051, .056
4240 DATA .078, .084, .084, .097
4245 DATA .049, .047, .046, .055
4250 DATA .050, .055, .053, .033
4255 DATA .025, .025, .024, .027
4260 DATA .170, .171, .187, .168
4265 DATA .015, .017, .010, .019
4270 DATA .025, .024, .035, .028
4275 '
4280 FOR X = 1 TO 16
4285     FOR Y = 1 TO 4
4290         READ PCTD (X,Y)
4295     NEXT Y
4300 NEXT X
4305 PRINT
4310 '
4315 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2";
                                TAB(37) "QTR 3";
                                TAB(47) "QTR 4"
4320 PRINT "DOV-GER"; TAB(17) ".066"; TAB(27) ".053"; TAB(37)
) ".044"; TAB(47) ".050"
4325 PRINT "DOV-MED"; TAB(17) ".108"; TAB(27) ".074"; TAB(37)
) ".049"; TAB(47) ".011"
4330 PRINT "DOV-M/E"; TAB(17) ".014"; TAB(27) ".014"; TAB(37)
) ".014"; TAB(47) ".016"
4335 PRINT "WRI-LGS"; TAB(17) ".092"; TAB(27) ".093"; TAB(37)
) ".094"; TAB(47) ".108"
4340 PRINT "WRI-MED"; TAB(17) ".160"; TAB(27) ".203"; TAB(37)
) ".212"; TAB(47) ".217"
4345 PRINT "WRI-N/C"; TAB(17) ".076"; TAB(27) ".071"; TAB(37)
) ".076"; TAB(47) ".090"
4350 PRINT "CHS-AFR"; TAB(17) ".019"; TAB(27) ".016"; TAB(37)
) ".016"; TAB(47) ".018"

```

```

4355 PRINT "CHS-BDA"; TAB(17) ".006"; TAB(27) ".006"; TAB(37
) ".005"; TAB(47) ".007"
4360 PRINT "CHS-C/S"; TAB(17) ".047"; TAB(27) ".047"; TAB(37
) ".051"; TAB(47) ".056"
4365 PRINT "CHS-UK"; TAB(17) ".078"; TAB(27) ".084"; TAB(37)
".084"; TAB(47) ".097"
4370 PRINT "COF-AFR"; TAB(17) ".049"; TAB(27) ".047"; TAB(37
) ".046"; TAB(47) ".055"
4375 PRINT "NGU-AFR"; TAB(17) ".050"; TAB(27) ".055"; TAB(37
) ".053"; TAB(47) ".033"
4380 PRINT "NGU-CARIB"; TAB(17) ".025"; TAB(27) ".025"; TAB(
37) ".024"; TAB(47) ".027"
4385 PRINT "NGU-MED"; TAB(17) ".170"; TAB(27) ".171"; TAB(37
) ".187"; TAB(47) ".168"
4390 PRINT "NGU-M/E"; TAB(17) ".015"; TAB(27) ".017"; TAB(37
) ".010"; TAB(47) ".019"
4395 PRINT "NGU-N/C"; TAB(17) ".025"; TAB(27) ".024"; TAB(37
) ".035"; TAB(47) ".028"
4400 PRINT
4405 PRINT
4410 PRINT "These are the MAI percentages for 21 AF C-141 ch
annel airlift."
4415 PRINT
4420 INPUT "Do you wish to change any percentages? (1 for Ye
s, 2 for No)",JCM
4425 PRINT
4430 IF JCM = 1 THEN 4435 ELSE 5840
4435 PRINT
4440 PRINT
4445 INPUT "What is DOV-GER for the 1st quarter?", MAB1
4450 IF MAB1 = CHR THEN MAB1 = PCTD (1,1)
4455 IF MAB1 <> PCTD (1,1) THEN PCTD (1,1) = MAB1
4460 PRINT
4465 INPUT "What is DOV-MED for the 1st quarter?", MAC1
4470 IF MAC1 = CHR THEN MAC1 = PCTD (2,1)
4475 IF MAC1 <> PCTD (2,1) THEN PCTD (2,1) = MAC1
4480 PRINT
4485 INPUT "What is DOV-M/E for the 1st quarter?", MAD1
4490 IF MAD1 = CHR THEN MAD1 = PCTD (3,1)
4495 IF MAD1 <> PCTD (3,1) THEN PCTD (3,1) = MAD1
4500 PRINT
4505 INPUT "What is WRI-LGS for the 1st quarter?", MAF1
4510 IF MAF1 = CHR THEN MAF1 = PCTD (4,1)
4515 IF MAF1 <> PCTD (4,1) THEN PCTD (4,1) = MAF1
4520 PRINT
4525 INPUT "What is WRI-MED for the 1st quarter?", MAG1
4530 IF MAG1 = CHR THEN MAG1 = PCTD (5,1)
4535 IF MAG1 <> PCTD (5,1) THEN PCTD (5,1) = MAG1
4540 PRINT
4545 INPUT "What is WRI-N/C for the 1st quarter?", MAH1
4550 IF MAH1 = CHR THEN MAH1 = PCTD (6,1)
4555 IF MAH1 <> PCTD (6,1) THEN PCTD (6,1) = MAH1
4560 PRINT

```

```

4565 INPUT "What is CHS-AFR for the 1st quarter?", MAJ1
4570     IF MAJ1 = CHR THEN MAJ1 = PCTD (7,1)
4575     IF MAJ1 <> PCTD (7,1) THEN PCTD (7,1) = MAJ1
4580 PRINT
4585 INPUT "What is CHS-BDA for the 1st quarter?", MAK1
4590     IF MAK1 = CHR THEN MAK1 = PCTD (8,1)
4595     IF MAK1 <> PCTD (8,1) THEN PCTD (8,1) = MAK1
4600 PRINT
4605 INPUT "What is CHS-C/S for the 1st quarter?", MAL1
4610     IF MAL1 = CHR THEN MAL1 = PCTD (9,1)
4615     IF MAL1 <> PCTD (9,1) THEN PCTD (9,1) = MAL1
4620 PRINT
4625 INPUT "What is CHS-UK for the 1st quarter?", MAM1
4630     IF MAM1 = CHR THEN MAM1 = PCTD (10,1)
4635     IF MAM1 <> PCTD (10,1) THEN PCTD (10,1) = MAM1
4640 PRINT
4645 INPUT "What is COF-AFR for the 1st quarter?", MAN1
4650     IF MAN1 = CHR THEN MAN1 = PCTD (11,1)
4655     IF MAN1 <> PCTD (11,1) THEN PCTD (11,1) = MAN1
4660 PRINT
4665 INPUT "What is NGU-AFR for the 1st quarter?", MAP1
4670     IF MAP1 = CHR THEN MAP1 = PCTD (12,1)
4675     IF MAP1 <> PCTD (12,1) THEN PCTD (12,1) = MAP1
4680 PRINT
4685 INPUT "What is NGU-CARIB for the 1st quarter?", MAQ1
4690     IF MAQ1 = CHR THEN MAQ1 = PCTD (13,1)
4695     IF MAQ1 <> PCTD (13,1) THEN PCTD (13,1) = MAQ1
4700 PRINT
4705 INPUT "What is NGU-MED for the 1st quarter?", MAR1
4710     IF MAR1 = CHR THEN MAR1 = PCTD (14,1)
4715     IF MAR1 <> PCTD (14,1) THEN PCTD (14,1) = MAR1
4720 PRINT
4725 INPUT "What is NGU-M/E for the 1st quarter?", MAS1
4730     IF MAS1 = CHR THEN MAS1 = PCTD (15,1)
4735     IF MAS1 <> PCTD (15,1) THEN PCTD (15,1) = MAS1
4740 PRINT
4745 INPUT "What is NGU-N/C for the 1st quarter?", MAT1
4750     IF MAT1 = CHR THEN MAT1 = PCTD (16,1)
4755     IF MAT1 <> PCTD (16,1) THEN PCTD (16,1) = MAT1
4760 PRINT
4765 SUMA1 = PCTD (1,1) + PCTD (2,1) + PCTD (3,1) + PCTD (4,
1) + PCTD (5,1)
4770 SUMB1 = PCTD (6,1) + PCTD (7,1) + PCTD (8,1) + PCTD (9,
1) + PCTD (10,1)
4775 SUMC1 = PCTD(11,1)+PCTD(12,1)+PCTD(13,1)+PCTD(14,1)+PCT
D(15,1)+PCTD(16,1)
4780 IF SUMA1 + SUMB1 + SUMC1 <> 1 THEN PRINT: PRINT "THE MA
I PERCENTAGES FOR THE 1ST QUARTER DO NOT SUM TO 1.00.": PRINT
"PLEASE ENTER ALL OF THE 1ST QUARTER PERCENTAGES AGAIN.": GO
TO 4440
4785 PRINT
4790 INPUT "What is DOV-GER for the 2nd quarter?", MAB2
4795     IF MAB2 = CHR THEN MAB2 = PCTD (1,2)

```

```

4800         IF MAB2 <> PCTD (1,2) THEN PCTD (1,2) = MAB2
4805 PRINT
4810 INPUT  "What is DOV-MED for the 2nd quarter?", MAC2
4815         IF MAC2 = CHR THEN MAC2 = PCTD (2,2)
4820         IF MAC2 <> PCTD (2,2) THEN PCTD (2,2) = MAC2
4825 PRINT
4830 INPUT  "What is DOV-M/E for the 2nd quarter?", MAD2
4835         IF MAD2 = CHR THEN MAD2 = PCTD (3,2)
4840         IF MAD2 <> PCTD (3,2) THEN PCTD (3,2) = MAD2
4845 PRINT
4850 INPUT  "What is WRI-LGS for the 2nd quarter?", MAF2
4855         IF MAF2 = CHR THEN MAF2 = PCTD (4,2)
4860         IF MAF2 <> PCTD (4,2) THEN PCTD (4,2) = MAF2
4865 PRINT
4870 INPUT  "What is WRI-MED for the 2nd quarter?", MAG2
4875         IF MAG2 = CHR THEN MAG2 = PCTD (5,2)
4880         IF MAG2 <> PCTD (5,2) THEN PCTD (5,2) = MAG2
4885 PRINT
4890 INPUT  "What is WRI-N/C for the 2nd quarter?", MAH2
4895         IF MAH2 = CHR THEN MAH2 = PCTD (6,2)
4900         IF MAH2 <> PCTD (6,2) THEN PCTD (6,2) = MAH2
4905 PRINT
4910 INPUT  "What is CHS-AFR for the 2nd quarter?", MAJ2
4915         IF MAJ2 = CHR THEN MAJ2 = PCTD (7,2)
4920         IF MAJ2 <> PCTD (7,2) THEN PCTD (7,2) = MAJ2
4925 PRINT
4930 INPUT  "What is CHS-BDA for the 2nd quarter?", MAK2
4935         IF MAK2 = CHR THEN MAK2 = PCTD (8,2)
4940         IF MAK2 <> PCTD (8,2) THEN PCTD (8,2) = MAK2
4945 PRINT
4950 INPUT  "What is CHS-C/S for the 2nd quarter?", MAL2
4955         IF MAL2 = CHR THEN MAL2 = PCTD (9,2)
4960         IF MAL2 <> PCTD (9,2) THEN PCTD (9,2) = MAL2
4965 PRINT
4970 INPUT  "What is CHS-UK for the 2nd quarter?", MAM2
4975         IF MAM2 = CHR THEN MAM2 = PCTD (10,2)
4980         IF MAM2 <> PCTD (10,2) THEN PCTD (10,2) = MAM2
4985 PRINT
4990 INPUT  "What is COF-AFR for the 2nd quarter?", MAN2
4995         IF MAN2 = CHR THEN MAN2 = PCTD (11,2)
5000         IF MAN2 <> PCTD (11,2) THEN PCTD (11,2) = MAN2
5005 PRINT
5010 INPUT  "What is NGU-AFR for the 2nd quarter?", MAP2
5015         IF MAP2 = CHR THEN MAP2 = PCTD (12,2)
5020         IF MAP2 <> PCTD (12,2) THEN PCTD (12,2) = MAP2
5025 PRINT
5030 INPUT  "What is NGU-CARIB for the 2nd quarter?", MAQ2
5035         IF MAQ2 = CHR THEN MAQ2 = PCTD (13,2)
5040         IF MAQ2 <> PCTD (13,2) THEN PCTD (13,2) = MAQ2
5045 PRINT
5050 INPUT  "What is NGU-MED for the 2nd quarter?", MAR2
5055         IF MAR2 = CHR THEN MAR2 = PCTD (14,2)
5060         IF MAR2 <> PCTD (14,2) THEN PCTD (14,2) = MAR2

```

```

5065 PRINT
5070 INPUT "What is NGU-M/E for the 2nd quarter?", MAS2
5075     IF MAS2 = CHR THEN MAS2 = PCTD (15,2)
5080     IF MAS2 <> PCTD (15,2) THEN PCTD (15,2) = MAS2
5085 PRINT
5090 INPUT "What is NGU-N/C for the 2nd quarter?", MAT2
5095     IF MAT2 = CHR THEN MAT2 = PCTD (16,2)
5100     IF MAT2 <> PCTD (16,2) THEN PCTD (16,2) = MAT2
5105 '
5110 SUMD1 = PCTD(1,2) + PCTD(2,2) + PCTD(3,2) + PCTD(4,2) +
      PCTD(5,2)
5115 SUME1 = PCTD(6,2) + PCTD(7,2) + PCTD(8,2) + PCTD(9,2) +
      PCTD(10,2)
5120 SUMF1 = PCTD(11,2)+PCTD(12,2)+PCTD(13,2)+PCTD(14,2)+PCT
      D(15,2)+PCTD(16,2)
5125 '
5130 IF SUMD1 + SUME1 + SUMF1 <> 1 THEN PRINT : PRINT "THE M
      AI PERCENTAGES FOR THE 2ND QUARTER DO NOT SUM TO 1.00." : PRI
      NT "PLEASE ENTER ALL OF THE 2ND QUARTER PERCENTAGES AGAIN." :
      GOTO 4785
5135 PRINT
5140 PRINT
5145 INPUT "What is DOV-GER for the 3rd quarter?", MAB3
5150     IF MAB3 = CHR THEN MAB3 = PCTD(1,3)
5155     IF MAB3 <> PCTD(1,3) THEN PCTD(1,3) = MAB3
5160 PRINT
5165 INPUT "What is DOV-MED for the 3rd quarter?", MAC3
5170     IF MAC3 = CHR THEN MAC3 = PCTD(2,3)
5175     IF MAC3 <> PCTD(2,3) THEN PCTD(2,3) = MAC3
5180 PRINT
5185 INPUT "What is DOV-M/E for the 3rd quarter?", MAD3
5190     IF MAD3 = CHR THEN MAD3 = PCTD(3,3)
5195     IF MAD3 <> PCTD(3,3) THEN PCTD(3,3) = MAD3
5200 PRINT
5205 INPUT "What is WRI-LGS for the 3rd quarter?", MAF3
5210     IF MAF3 = CHR THEN MAF3 = PCTD(4,3)
5215     IF MAF3 <> PCTD(4,3) THEN PCTD(4,3) = MAF3
5220 PRINT
5225 INPUT "What is WRI-MED for the 3rd quarter?", MAG3
5230     IF MAG3 = CHR THEN MAG3 = PCTD(5,3)
5235     IF MAG3 <> PCTD(5,3) THEN PCTD(5,3) = MAG3
5240 PRINT
5245 INPUT "What is WRI-N/C for the 3rd quarter?", MAH3
5250     IF MAH3 = CHR THEN MAH3 = PCTD(6,3)
5255     IF MAH3 <> PCTD(6,3) THEN PCTD(6,3) = MAH3
5260 PRINT
5265 INPUT "What is CHS-AFR for the 3rd quarter?", MAJ3
5270     IF MAJ3 = CHR THEN MAJ3 = PCTD(7,3)
5275     IF MAJ3 <> PCTD(7,3) THEN PCTD(7,3) = MAJ3
5280 PRINT
5285 INPUT "What is CHS-BDA for the 3rd quarter?", MAK3
5290     IF MAK3 = CHR THEN MAK3 = PCTD(8,3)
5295     IF MAK3 <> PCTD(8,3) THEN PCTD(8,3) = MAK3

```

```

5300 PRINT
5305 INPUT "What is CHS-C/S for the 3rd quarter?",MAL3
5310     IF MAL3 = CHR THEN MAL3 = PCTD(9,3)
5315     IF MAL3 <> PCTD(9,3) THEN PCTD(9,3) = MAL3
5320 PRINT
5325 INPUT "What is CHS-UK for the 3rd quarter?",MAM3
5330     IF MAM3 = CHR THEN MAM3 = PCTD(10,3)
5335     IF MAM3 <> PCTD(10,3) THEN PCTD(10,3) = MAM3
5340 PRINT
5345 INPUT "What is COF-AFR for the 3rd quarter?", MAN3
5350     IF MAN3 = CHR THEN MAN3 = PCTD(11,3)
5355     IF MAN3 <> PCTD(11,3) THEN PCTD(11,3) = MAN3
5360 PRINT
5365 INPUT "What is NGU-AFR for the 3rd quarter?",MAP3
5370     IF MAP3 = CHR THEN MAP3 = PCTD(12,3)
5375     IF MAP3 <> PCTD(12,3) THEN PCTD(12,3) = MAP3
5380 PRINT
5385 INPUT "What is NGU-CARIB for the 3rd quarter?",MAQ3
5390     IF MAQ3 = CHR THEN MAQ3 = PCTD(13,3)
5395     IF MAQ3 <> PCTD(13,3) THEN PCTD(13,3) = MAQ3
5400 PRINT
5405 INPUT "What is NGU-MED for the 3rd quarter?", MAR3
5410     IF MAR3 = CHR THEN MAR3 = PCTD(14,3)
5415     IF MAR3 <> PCTD(14,3) THEN PCTD(14,3) = MAR3
5420 PRINT
5425 INPUT "What is NGU-M/E for the 3rd quarter?", MAS3
5430     IF MAS3 = CHR THEN MAS3 = PCTD(15,3)
5435     IF MAS3 <> PCTD(15,3) THEN PCTD(15,3) = MAS3
5440 PRINT
5445 INPUT "What is NGU-N/C for the 3rd quarter?", MAT3
5450     IF MAT3 = CHR THEN MAT3 = PCTD(16,3)
5455     IF MAT3 <> PCTD(16,3) THEN PCTD(16,3) = MAT3
5460 PRINT
5465 SUMG1 = PCTD(1,3) + PCTD(2,3) + PCTD(3,3) + PCTD(4,3) +
PCTD(5,3)
5470 SUMH1 = PCTD(6,3) + PCTD(7,3) + PCTD(8,3) + PCTD(9,3) +
PCTD(10,3)
5475 SUMI1 = PCTD(11,3)+PCTD(12,3)+PCTD(13,3)+PCTD(14,3)+PCT
D(15,3)+PCTD(16,3)
5480
5485 IF SUMG1 + SUMH1 + SUMI1 <> 1 THEN PRINT : PRINT "THE M
AI PERCENTAGES FOR THE 3RD QUARTER DO NOT SUM TO 1.00." : PRI
NT "PLEASE ENTER ALL OF THE 3RD QUARTER PERCENTAGES AGAIN." :
GOTO 5140
5490 PRINT
5495 INPUT "What is DOV-GER for the 4th quarter?", MAB4
5500     IF MAB4 = CHR THEN MAB4 = PCTD(1,4)
5505     IF MAB4 <> PCTD(1,4) THEN PCTD(1,4) = MAB4
5510 PRINT
5515 INPUT "What is DOV-MED for the 4th quarter?", MAC4
5520     IF MAC4 = CHR THEN MAC4 = PCTD(2,4)
5525     IF MAC4 <> PCTD(2,4) THEN PCTD(2,4) = MAC4
5530 PRINT

```

```

5535 INPUT "What is DOV-M/E for the 4th quarter?", MAD4
5540     IF MAD4 = CHR THEN MAD4 = PCTD(3,4)
5545     IF MAD4 <> PCTD(3,4) THEN PCTD(3,4) = MAD4
5550 PRINT
5555 INPUT "What is WRI-LGS for the 4th quarter?",MAF4
5560     IF MAF4 = CHR THEN MAF4 = PCTD(4,4)
5565     IF MAF4 <> PCTD(4,4) THEN PCTD(4,4) = MAF4
5570 PRINT
5575 INPUT "What is WRI-MED for the 4th quarter?",MAG4
5580     IF MAG4 = CHR THEN MAG4 = PCTD(5,4)
5585     IF MAG4 <> PCTD(5,4) THEN PCTD(5,4) = MAG4
5590 PRINT
5595 INPUT "What is WRI-N/C for the 4th quarter?",MAH4
5600     IF MAH4 = CHR THEN MAH4 = PCTD(6,4)
5605     IF MAH4 <> PCTD(6,4) THEN PCTD(6,4) = MAH4
5610 PRINT
5615 INPUT "What is CHS-AFR for the 4th quarter?",MAJ4
5620     IF MAJ4 = CHR THEN MAJ4 = PCTD(7,4)
5625     IF MAJ4 <> PCTD(7,4) THEN PCTD(7,4) = MAJ4
5630 PRINT
5635 INPUT "What is CHS-BDA for the 4th quarter?",MAK4
5640     IF MAK4 = CHR THEN MAK4 = PCTD(8,4)
5645     IF MAK4 <> PCTD(8,4) THEN PCTD(8,4) = MAK4
5650 PRINT
5655 INPUT "What is CHS-C/S for the 4th quarter?",MAL4
5660     IF MAL4 = CHR THEN MAL4 = PCTD(9,4)
5665     IF MAL4 <> PCTD(9,4) THEN PCTD(9,4) = MAL4
5670 PRINT
5675 INPUT "What is CHS-UK for the 4th quarter?",MAM4
5680     IF MAM4 = CHR THEN MAM4 = PCTD(10,4)
5685     IF MAM4 <> PCTD(10,4) THEN PCTD(10,4) = MAM4
5690 PRINT
5695 INPUT "What is COF-AFR for the 4th quarter?",MAN4
5700     IF MAN4 = CHR THEN MAN4 = PCTD(11,4)
5705     IF MAN4 <> PCTD(11,4) THEN PCTD(11,4) = MAN4
5710 PRINT
5715 INPUT "What is NGU-AFR for the 4th quarter?",MAP4
5720     IF MAP4 = CHR THEN MAP4 = PCTD(12,4)
5725     IF MAP4 <> PCTD(12,4) THEN PCTD(12,4) = MAP4
5730 PRINT
5735 INPUT "What is NGU-CARIB for the 4th quarter?",MAQ4
5740     IF MAQ4 = CHR THEN MAQ4 = PCTD(13,4)
5745     IF MAQ4 <> PCTD(13,4) THEN PCTD(13,4) = MAQ4
5750 PRINT
5755 INPUT "What is NGU-MED for the 4th quarter?",MAR4
5760     IF MAR4 = CHR THEN MAR4 = PCTD(14,4)
5765     IF MAR4 <> PCTD(14,4) THEN PCTD(14,4) = MAR4
5770 PRINT
5775 INPUT "What is NGU-M/E for the 4th quarter?",MAS4
5780     IF MAS4 = CHR THEN MAS4 = PCTD(15,4)
5785     IF MAS4 <> PCTD(15,4) THEN PCTD(15,4) = MAS4
5790 PRINT
5795 INPUT "What is NGU-N/C for the 4th quarter?",MAT4

```

```

5800         IF MAT4 = CHR THEN MAT4 = PCTD(16,4)
5805         IF MAT4 <> PCTD(16,4) THEN PCTD(16,4) = MAT4
5810 PRINT
5815 SUMJ1 = PCTD(1,4) + PCTD(2,4) + PCTD(3,4) + PCTD(4,4) +
PCTD(5,4)
5820 SUMK1 = PCTD(6,4) + PCTD(7,4) + PCTD(8,4) + PCTD(9,4) +
PCTD(10,4)
5825 SUML1 = PCTD(11,4)+PCTD(12,4)+PCTD(13,4)+PCTD(14,4)+PCT
D(15,4)+PCTD(16,4)
5830
5835 IF SUMJ1 + SUMK1 + SUML1 <> 1 THEN PRINT : PRINT "THE M
AI PERCENTAGES FOR THE 4TH QUARTER DO NOT SUM TO 1.00.": PRIN
T "PLEASE ENTER ALL OF THE 4TH QUARTER PERCENTAGES AGAIN." :
GOTO 5490
5840
5845 DIM AVGD(16,4), FLYD(16,4), NUMD(16,4), CAPD(16,4)
5850
5855 DATA 29.02, 30.35, 32.03, 32.09
5860 DATA 28.74, 30.47, 31.43, 27.92
5865 DATA 30.17, 30.21, 30.17, 30.17
5870 DATA 23.69, 23.88, 23.91, 24.64
5875 DATA 31.39, 29.70, 29.09, 30.10
5880 DATA 14.25, 14.24, 14.25, 14.00
5885 DATA 37.12, 38.17, 37.38, 37.58
5890 DATA 12.72, 12.72, 12.69, 12.73
5895 DATA 14.66, 15.13, 15.60, 15.63
5900 DATA 18.66, 18.81, 19.34, 19.16
5905 DATA 25.90, 26.46, 25.93, 26.41
5910 DATA 50.83, 51.07, 51.13, 51.71
5915 DATA 10.66, 10.71, 10.70, 10.59
5920 DATA 32.70, 32.93, 31.43, 31.01
5925 DATA 35.50, 35.67, 35.42, 35.32
5930 DATA 13.08, 13.25, 13.94, 13.17
5935
5940 FOR X = 1 TO 16
5945     FOR Y = 1 TO 4
5950         READ AVGD (X,Y)
5955         FLYD (X,1) = INTERE * PCTD (X,1)
5960         FLYD (X,2) = INTERF * PCTD (X,2)
5965         FLYD (X,3) = INTERG * PCTD (X,3)
5970         FLYD (X,4) = INTERH * PCTD (X,4)
5975         NUMD (X,Y) = CINT(FLYD(X,Y)/AVGD(X,Y))
5980         CAPD (X,Y) = NUMD(X,Y) * 20
5985     NEXT Y
5990 NEXT X
5995 PRINT
6000 PRINT
6005 PRINT
6010 PRINT
6015
6020 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2";
TAB(37) "QTR 3";
TAB(47) "QTR 4"

```

```

6025 PRINT "DOV-GER"; TAB(17) CAPD(1,1); TAB(27) CAPD(1,2);
      TAB(37) CAPD(1,3);
TAB(47) CAPD(1,4)
6030 PRINT "DOV-MED"; TAB(17) CAPD(2,1); TAB(27) CAPD(2,2);
      TAB(37) CAPD(2,3);
TAB(47) CAPD(2,4)
6035 PRINT "DOV-M/E"; TAB(17) CAPD(3,1); TAB(27) CAPD(3,2);
      TAB(37) CAPD(3,3);
TAB(47) CAPD(3,4)
6040 PRINT "WRI-LGS"; TAB(17) CAPD(4,1); TAB(27) CAPD(4,2);
      TAB(37) CAPD(4,3);
TAB(47) CAPD(4,4)
6045 PRINT "WRI-MED"; TAB(17) CAPD(5,1); TAB(27) CAPD(5,2);
      TAB(37) CAPD(5,3);
TAB(47) CAPD(5,4)
6050 PRINT "WRI-N/C"; TAB(17) CAPD(6,1); TAB(27) CAPD(6,2);
      TAB(37) CAPD(6,3);
TAB(47) CAPD(6,4)
6055 PRINT "CHS-AFR"; TAB(17) CAPD(7,1); TAB(27) CAPD(7,2);
      TAB(37) CAPD(7,3);
TAB(47) CAPD(7,4)
6060 PRINT "CHS-BDA"; TAB(17) CAPD(8,1); TAB(27) CAPD(8,2);
      TAB(37) CAPD(8,3);
TAB(47) CAPD(8,4)
6065 PRINT "CHS-C/S"; TAB(17) CAPD(9,1); TAB(27) CAPD(9,2);
      TAB(37) CAPD(9,3);
TAB(47) CAPD(9,4)
6070 PRINT "CHS-UK"; TAB(17) CAPD(10,1); TAB(27) CAPD(10,2)
;
      TAB(37) CAPD(10,3);
TAB(47) CAPD(10,4)
6075 PRINT "COF-AFR"; TAB(17) CAPD(11,1); TAB(27) CAPD(11,2)
;
      TAB(37) CAPD(11,3);
TAB(47) CAPD(11,4)
6080 PRINT "NGU-AFR"; TAB(17) CAPD(12,1); TAB(27) CAPD(12,2)
;
      TAB(37) CAPD(12,3);
TAB(47) CAPD(12,4)
6085 PRINT "NGU-CARIB"; TAB(17) CAPD(13,1); TAB(27) CAPD(13,
2);
      TAB(37) CAPD(13,3)
); TAB(47) CAPD(13,4)
6090 PRINT "NGU-MED"; TAB(17) CAPD(14,1); TAB(27) CAPD(14,2)
;
      TAB(37) CAPD(14,3);
TAB(47) CAPD(14,4)
6095 PRINT "NGU-M/E"; TAB(17) CAPD(15,1); TAB(27) CAPD(15,2)
;
      TAB(37) CAPD(15,3);
TAB(47) CAPD(15,4)
6100 PRINT "NGU-N/C"; TAB(17) CAPD(16,1); TAB(27) CAPD(16,2)
;
      TAB(37) CAPD(16,3);
TAB(47) CAPD(16,4)
6105 PRINT
6110 PRINT
6115 PRINT "The above figures are the C-141 channel airlift
capability expressed in tons forthe 21 AF."
6120 PRINT

```

```

6125 INPUT "When you are ready to continue, hit any key.", B
READ
6130 PRINT
6135 PRINT
6140 PRINT
6145 PRINT
6150 PRINT "Now it's time to calculate either a surplus or d
eficit of airlift capability foreach MAI in 21 AF."
6155 PRINT
6160 PRINT
6165 PRINT
6170 INPUT "What is the DOV-GER forecast for the 1st quarter
?", CAST1
6175 PRINT
6180 INPUT "What is the DOV-GER forecast for the 2nd quarter
?", CAST2
6185 PRINT
6190 INPUT "What is the DOV-GER forecast for the 3rd quarter
?", CAST3
6195 PRINT
6200 INPUT "What is the DOV-GER forecast for the 4th quarter
?", CAST4
6205 PRINT
6210 INPUT "What is the DOV-MED forecast for the 1st quarter
?", CAST5
6215 PRINT
6220 INPUT "What is the DOV-MED forecast for the 2nd quarter
?", CAST6
6225 PRINT
6230 INPUT "What is the DOV-MED forecast for the 3rd quarter
?", CAST7
6235 PRINT
6240 INPUT "What is the DOV-MED forecast for the 4th quarter
?", CAST8
6245 PRINT
6250 INPUT "What is the DOV-M/E forecast for the 1st quarter
?", CAST9
6255 PRINT
6260 INPUT "What is the DOV-M/E forecast for the 2nd quarter
?", CAST10
6265 PRINT
6270 INPUT "What is the DOV-M/E forecast for the 3rd quarter
?", CAST11
6275 PRINT
6280 INPUT "What is the DOV-M/E forecast for the 4th quarter
?", CAST12
6285 PRINT
6290 INPUT "What is the WRI-LGS forecast for the 1st quarter
?", CAST13
6295 PRINT
6300 INPUT "What is the WRI-LGS forecast for the 2nd quarter
?", CAST14
6305 PRINT

```

6310 INPUT "What is the WRI-LGS forecast for the 3rd quarter  
?", CAST15  
6315 PRINT  
6320 INPUT "What is the WRI-LGS forecast for the 4th quarter  
?", CAST16  
6325 PRINT  
6330 INPUT "What is the WRI-MED forecast for the 1st quarter  
?", CAST17  
6335 PRINT  
6340 INPUT "What is the WRI-MED forecast for the 2nd quarter  
?", CAST18  
6345 PRINT  
6350 INPUT "What is the WRI-MED forecast for the 3rd quarter  
?", CAST19  
6355 PRINT  
6360 INPUT "What is the WRI-MED forecast for the 4th quarter  
?", CAST20  
6365 PRINT  
6370 INPUT "What is the WRI-N/C forecast for the 1st quarter  
?", CAST21  
6375 PRINT  
6380 INPUT "What is the WRI-N/C forecast for the 2nd quarter  
?", CAST22  
6385 PRINT  
6390 INPUT "What is the WRI-N/C forecast for the 3rd quarter  
?", CAST23  
6395 PRINT  
6400 INPUT "What is the WRI-N/C forecast for the 4th quarter  
?", CAST24  
6405 PRINT  
6410 INPUT "What is the CHS-AFR forecast for the 1st quarter  
?", CAST25  
6415 PRINT  
6420 INPUT "What is the CHS-AFR forecast for the 2nd quarter  
?", CAST26  
6425 PRINT  
6430 INPUT "What is the CHS-AFR forecast for the 3rd quarter  
?", CAST27  
6435 PRINT  
6440 INPUT "What is the CHS-AFR forecast for the 4th quarter  
?", CAST28  
6445 PRINT  
6450 INPUT "What is the CHS-BDA forecast for the 1st quarter  
?", CAST29  
6455 PRINT  
6460 INPUT "What is the CHS-BDA forecast for the 2nd quarter  
?", CAST30  
6465 PRINT  
6470 INPUT "What is the CHS-BDA forecast for the 3rd quarter  
?", CAST31  
6475 PRINT  
6480 INPUT "What is the CHS-BDA forecast for the 4th quarter  
?", CAST32

6485 PRINT  
6490 INPUT "What is the CHS-C/S forecast for the 1st quarter  
?", CAST33  
6495 PRINT  
6500 INPUT "What is the CHS-C/S forecast for the 2nd quarter  
?", CAST34  
6505 PRINT  
6510 INPUT "What is the CHS-C/S forecast for the 3rd quarter  
?", CAST35  
6515 PRINT  
6520 INPUT "What is the CHS-C/S forecast for the 4th quarter  
?", CAST36  
6525 PRINT  
6530 INPUT "What is the CHS-UK forecast for the 1st quarter?  
", CAST37  
6535 PRINT  
6540 INPUT "What is the CHS-UK forecast for the 2nd quarter?  
", CAST38  
6545 PRINT  
6550 INPUT "What is the CHS-UK forecast for the 3rd quarter?  
", CAST39  
6555 PRINT  
6560 INPUT "What is the CHS-UK forecast for the 4th quarter?  
", CAST40  
6565 PRINT  
6570 INPUT "What is the COF-AFR forecast for the 1st quarter  
?", CAST41  
6575 PRINT  
6580 INPUT "What is the COF-AFR forecast for the 2nd quarter  
?", CAST42  
6585 PRINT  
6590 INPUT "What is the COF-AFR forecast for the 3rd quarter  
?", CAST43  
6595 PRINT  
6600 INPUT "What is the COF-AFR forecast for the 4th quarter  
?", CAST44  
6605 PRINT  
6610 INPUT "What is the NGU-AFR forecast for the 1st quarter  
?", CAST45  
6615 PRINT  
6620 INPUT "What is the NGU-AFR forecast for the 2nd quarter  
?", CAST46  
6625 PRINT  
6630 INPUT "What is the NGU-AFR forecast for the 3rd quarter  
?", CAST47  
6635 PRINT  
6640 INPUT "What is the NGU-AFR forecast for the 4th quarter  
?", CAST48  
6645 PRINT  
6650 INPUT "What is the NGU-CARIB forecast for the 1st quart  
er?", CAST49  
6655 PRINT  
6660 INPUT "What is the NGU-CARIB forecast for the 2nd quart

```

er?", CAST50
6665 PRINT
6670 INPUT "What is the NGU-CARIB forecast for the 3rd quart
er?", CAST51
6675 PRINT
6680 INPUT "What is the NGU-CARIB forecast for the 4th quart
er?", CAST52
6685 PRINT
6690 INPUT "What is the NGU-MED forecast for the 1st quarter
?", CAST53
6695 PRINT
6700 INPUT "What is the NGU-MED forecast for the 2nd quarter
?", CAST54
6705 PRINT
6710 INPUT "What is the NGU-MED forecast for the 3rd quarter
?", CAST55
6715 PRINT
6720 INPUT "What is the NGU-MED forecast for the 4th quarter
?", CAST56
6725 PRINT
6730 INPUT "What is the NGU-M/E forecast for the 1st quarter
?", CAST57
6735 PRINT
6740 INPUT "What is the NGU-M/E forecast for the 2nd quarter
?", CAST58
6745 PRINT
6750 INPUT "What is the NGU-M/E forecast for the 3rd quarter
?", CAST59
6755 PRINT
6760 INPUT "What is the NGU-M/E forecast for the 4th quarter
?", CAST60
6765 PRINT
6770 INPUT "What is the NGU-N/C forecast for the 1st quarter
?", CAST61
6775 PRINT
6780 INPUT "What is the NGU-N/C forecast for the 2nd quarter
?", CAST62
6785 PRINT
6790 INPUT "What is the NGU-N/C forecast for the 3rd quarter
?", CAST63
6795 PRINT
6800 INPUT "What is the NGU-N/C forecast for the 4th quarter
?", CAST64
6805 PRINT
6810 PRINT
6815 PRINT
6820 PRINT
6825 DOV11 = CAPA(3,1) + CAPC(1,1) + CAPD(1,1) - CAST1
6830 DOV12 = CAPA(3,2) + CAPC(1,2) + CAPD(1,2) - CAST2
6835 DOV13 = CAPA(3,3) + CAPC(1,3) + CAPD(1,3) - CAST3
6840 DOV14 = CAPA(3,4) + CAPC(1,4) + CAPD(1,4) - CAST4
6845 '
6850 DOV21 = CAPB(3,1) + CAPB(8,1) + CAPB(13,1) + CAPC(2,1)

```

+ CAPD(2,1) - CAST5  
 6855 DOV22 = CAPB(3,2) + CAPB(8,2) + CAPB(13,2) + CAPC(2,2)  
 + CAPD(2,2) - CAST6  
 6860 DOV23 = CAPB(3,3) + CAPB(8,3) + CAPB(13,3) + CAPC(2,3)  
 + CAPD(2,3) - CAST7  
 6865 DOV24 = CAPB(3,4) + CAPB(8,4) + CAPB(13,3) + CAPC(2,4)  
 + CAPD(2,4) - CAST8  
 6870 '  
 6875 DOV31 = CAPB(4,1) + CAPB(9,1) + CAPB(14,1) + CAPC(3,1)  
 + CAPD(3,1) - CAST9  
 6880 DOV32 = CAPB(4,2) + CAPB(9,2) + CAPB(14,2) + CAPC(3,2)  
 + CAPD(3,2) -CAST10  
 6885 DOV33 = CAPB(4,3) + CAPB(9,3) + CAPB(14,3) + CAPC(3,3)  
 + CAPD(3,3) -CAST11  
 6890 DOV34 = CAPB(4,4) + CAPB(9,4) + CAPB(14,4) + CAPC(3,4)  
 + CAPD(3,4) -CAST12  
 6895 '  
 6900 WRI11 = CAPD(4,1) - CAST13 : WRI12 = CAPD(4,2) - CAST14  
 6905 WRI13 = CAPD(4,3) - CAST15 : WRI14 = CAPD(4,4) - CAST16  
 6910 '  
 6915 WRI21 = CAPB(5,1) + CAPB(10,1) + CAPB(15,1) + CAPD(5,1)  
 - CAST17  
 6920 WRI22 = CAPB(5,2) + CAPB(10,2) + CAPB(15,2) + CAPD(5,2)  
 - CAST18  
 6925 WRI23 = CAPB(5,3) + CAPB(10,3) + CAPB(15,3) + CAPD(5,3)  
 - CAST19  
 6926 WRI24 = CAPB(5,4) + CAPB(10,4) + CAPB(15,4) + CAPD(5,4)  
 - CAST20  
 6930 '  
 6935 WRI31 = CAPD(6,1) - CAST21 : WRI32 = CAPD(6,2) - CAST22  
 6940 WRI33 = CAPD(6,3) - CAST23 : WRI34 = CAPD(6,4) - CAST24  
 6945 '  
 6950 CHS11 = CAPD(7,1) - CAST25 : CHS12 = CAPD(7,2) - CAST26  
 6955 CHS13 = CAPD(7,3) - CAST27 : CHS14 = CAPD(7,4) - CAST28  
 6960 '  
 6965 CHS21 = CAPD(8,1) - CAST29 : CHS22 = CAPD(8,2) - CAST30  
 6970 CHS23 = CAPD(8,3) - CAST31 : CHS24 = CAPD(8,4) - CAST32  
 6975 '  
 6980 CHS31 = CAPD(9,1) - CAST33 : CHS32 = CAPD(9,2) - CAST34  
 6985 CHS33 = CAPC(5,3) + CAPD(9,3) - CAST35  
 6990 CHS34 = CAPC(5,4) + CAPD(9,4) - CAST36  
 6995 '  
 7000 CHS41 = CAPD(10,1) - CAST37 : CHS42 = CAPD(10,2) - CAST  
 38  
 7005 CHS43 = CAPD(10,3) - CAST39 : CHS44 = CAPD(10,4) - CAST  
 40  
 7010 '  
 7015 COF11 = CAPD(11,1) - CAST41 : COF12 = CAPD(11,2) - CAST  
 42  
 7020 COF13 = CAPC(6,3) + CAPD(11,3) - CAST43  
 7025 COF14 = CAPD(11,4) - CAST44  
 7030 '  
 7035 NGU11 = CAPD(12,1) - CAST45 : NGU12 = CAPD(12,2) - CAST

46  
 7040 NGU13 = CAPD(12,3) - CAST47 : NGU14 = CAPD(12,4) - CAST  
 48  
 7045 '  
 7050 NGU21 = CAPD(13,1) - CAST49 : NGU22 = CAPD(13,2) - CAST  
 50  
 7055 NGU23 = CAPD(13,3) - CAST51 : NGU24 = CAPD(13,4) - CAST  
 52  
 7060 '  
 7065 NGU31 = CAPC(4,1) + CAPD(14,1) - CAST53  
 7070 NGU32 = CAPC(4,2) + CAPD(14,2) - CAST54  
 7075 NGU33 = CAPC(4,3) + CAPD(14,3) - CAST55  
 7080 NGU34 = CAPC(4,4) + CAPD(14,4) - CAST56  
 7085 '  
 7090 NGU41 = CAPD(15,1) - CAST57 : NGU42 = CAPD(15,2) - CAST  
 58  
 7095 NGU43 = CAPD(15,3) - CAST59 : NGU44 = CAPD(15,4) - CAST  
 60  
 7100 '  
 7105 NGU51 = CAPD(16,1) - CAST61 : NGU52 = CAPD(16,2) - CAST  
 62  
 7110 NGU53 = CAPD(16,3) - CAST63 : NGU54 = CAPD(16,4) - CAST  
 64  
 7115 PRINT  
 7120 PRINT  
 7125 PRINT  
 7130 PRINT  
 7135 PRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2"; T  
 AB(37) "QTR 3"; TAB(47) "QTR 4"  
 7140 PRINT "DOV-GER"; TAB(17) DOV11; TAB(27) DOV12; TAB(37)  
 DOV13; TAB(47) DOV14  
 7145 PRINT "DOV-MED"; TAB(17) DOV21; TAB(27) DOV22; TAB(37)  
 DOV23; TAB(47) DOV24  
 7150 PRINT "DOV-M/E"; TAB(17) DOV31; TAB(27) DOV32; TAB(37)  
 DOV33; TAB(47) DOV34  
 7155 PRINT "WRI-LGS"; TAB(17) WRI11; TAB(27) WRI12; TAB(37)  
 WRI13; TAB(47) WRI14  
 7160 PRINT "WRI-MED"; TAB(17) WRI21; TAB(27) WRI22; TAB(37)  
 WRI23; TAB(47) WRI24  
 7165 PRINT "WRI-N/C"; TAB(17) WRI31; TAB(27) WRI32; TAB(37)  
 WRI33; TAB(47) WRI34  
 7170 PRINT "CHS-AFR"; TAB(17) CHS11; TAB(27) CHS12; TAB(37)  
 CHS13; TAB(47) CHS14  
 7175 PRINT "CHS-BDA"; TAB(17) CHS21; TAB(27) CHS22; TAB(37)  
 CHS23; TAB(47) CHS24  
 7180 PRINT "CHS-C/S"; TAB(17) CHS31; TAB(27) CHS32; TAB(37)  
 CHS33; TAB(47) CHS34  
 7185 PRINT "CHS-UK"; TAB(17) CHS41; TAB(27) CHS42; TAB(37)  
 CHS43; TAB(47) CHS44  
 7190 PRINT "COF-AFR"; TAB(17) COF11; TAB(27) COF12; TAB(37)  
 COF13; TAB(47) COF14  
 7195 PRINT "NGU-AFR"; TAB(17) NGU11; TAB(27) NGU12; TAB(37)  
 NGU13; TAB(47) NGU14

```

7200 PRINT "NGU-CARIB"; TAB(17) NGU21; TAB(27) NGU22; TAB(37
) NGU23; TAB(47) NGU24
7205 PRINT "NGU-MED"; TAB(17) NGU31; TAB(27) NGU32; TAB(37)
NGU33; TAB(47) NGU34
7210 PRINT "NGU-M/E"; TAB(17) NGU41; TAB(27) NGU42; TAB(37)
NGU43; TAB(47) NGU44
7215 PRINT "NGU-N/C"; TAB(17) NGU51; TAB(27) NGU52; TAB(37)
NGU53; TAB(47) NGU54
7220 PRINT
7225 PRINT
7230 PRINT "The positive numbers above indicate a potential
surplus while the negative numbers indicate a potential
deficit of airlift capability."
7235 PRINT
7240 INPUT "Do you wish to print the table above? (1 for Yes
, 2 for No)",BOOB
7245 IF BOOB = 1 THEN 7255 ELSE 7370
7250 PRINT
7255 LPRINT
7260 LPRINT
7265 LPRINT TAB(3) "MAI"; TAB(17) "QTR 1"; TAB(27) "QTR 2";
TAB(37) "QTR 3"; TAB(47) "QTR 4"
7270 LPRINT "DOV-GER"; TAB(17) DOV11; TAB(27) DOV12; TAB(37)
DOV13; TAB(47) DOV14
7275 LPRINT "DOV-MED"; TAB(17) DOV21; TAB(27) DOV22; TAB(37)
DOV23; TAB(47) DOV24
7280 LPRINT "DOV-M/E"; TAB(17) DOV31; TAB(27) DOV32; TAB(37)
DOV33; TAB(47) DOV34
7285 LPRINT "WRI-LGS"; TAB(17) WRI11; TAB(27) WRI12; TAB(37)
WRI13; TAB(47) WRI14
7290 LPRINT "WRI-MED"; TAB(17) WRI21; TAB(27) WRI22; TAB(37)
WRI23; TAB(47) WRI24
7295 LPRINT "WRI-N/C"; TAB(17) WRI31; TAB(27) WRI32; TAB(37)
WRI33; TAB(47) WRI34
7300 LPRINT "CHS-AFR"; TAB(17) CHS11; TAB(27) CHS12; TAB(37)
CHS13; TAB(47) CHS14
7305 LPRINT "CHS-BDA"; TAB(17) CHS21; TAB(27) CHS22; TAB(37)
CHS23; TAB(47) CHS24
7310 LPRINT "CHS-C/S"; TAB(17) CHS31; TAB(27) CHS32; TAB(37)
CHS33; TAB(47) CHS34
7315 LPRINT "CHS-UK"; TAB(17) CHS41; TAB(27) CHS42; TAB(37)
CHS43; TAB(47) CHS44
7320 LPRINT "COF-AFR"; TAB(17) COF11; TAB(27) COF12; TAB(37)
COF13; TAB(47) COF14
7325 LPRINT "NGU-AFR"; TAB(17) NGU11; TAB(27) NGU12; TAB(37)
NGU13; TAB(47) NGU14
7330 LPRINT "NGU-CARIB"; TAB(17) NGU21; TAB(27) NGU22; TAB(3
7) NGU23; TAB(47) NGU24
7335 LPRINT "NGU-MED"; TAB(17) NGU31; TAB(27) NGU32; TAB(37)
NGU33; TAB(47) NGU34
7340 LPRINT "NGU-M/E"; TAB(17) NGU41; TAB(27) NGU42; TAB(37)
NGU43; TAB(47) NGU44
7345 LPRINT "NGU-N/C"; TAB(17) NGU51; TAB(27) NGU52; TAB(37)

```

NGU53; TAB(47) NGU54  
7350 LPRINT  
7355 LPRINT  
7360 LPRINT "The positive numbers above indicate a potential  
surplus while the negative numbers indicate a potential  
deficit of airlift capability."  
7365 '  
7370 END

## Bibliography

1. Airlift Operations School, Scott AFB IL. HQ MAC Office Descriptions. Washington DC: U.S. Government Printing Office, 1987.
2. Dees, Capt Danny. "Airlift Services Industrial Fund," Airlift, 8: 3-6 (Spring 1986).
3. Emory, C. William. Business Research Methods (Third Edition). Homewood IL: Irwin, 1985.
4. Harrison, Col Billy M. and Maj Kenneth R. Boerum. "Airlift Service Industrial Fund (ASIF)," Armed Forces Comptroller, 28: 22-23 (Fall 1983).
5. HQ MAC Airlift Operations Branch. MAC Cargo Schedule Pacific Region. Scott AFB IL: HQ MAC, January 1986.
6. HQ MAC Channel Requirements Division. MAC Sequence Listing for Channel Traffic. Scott AFB IL: HQ MAC, 1 October 1986.
7. McClave, James T. and P. George Benson. Statistics for Business and Economics (Third Edition). San Francisco: Dellen Publishing Company, 1985.
8. Miller, David W. and Martin K. Starr. Executive Decisions and Operations Research. Englewood Cliffs NJ: Prentice-Hall, Inc., 1969.
9. Nichols, Deanie, GS-12, Airlift Operations Branch. Telephone and personal interviews. HQ MAC, Scott AFB IL, 2 March 1988.
10. Porter, Capt Jeffrey A., Chief, Channel Requirements Division. Personal interviews. HQ MAC, Scott AFB IL, 9 October 1987 through 5 March 1988.
11. Richards, Lt Col James A. and Maj F.E. Ward, Jr. "How the Airlift Service Industrial Fund Works for Airlift," The Air Force Comptroller, 11: 42-44 (January 1977).
12. Shannon, Robert E. Systems Simulation. Englewood Cliffs NJ: Prentice-Hall, Inc., 1975.
13. Smith, Patricia, GS-5, Channel Requirements Division. Personal interview. HQ MAC, Scott AFB IL, 2 March 1988.

VITA

Major James M. Ford was born on [REDACTED]

[REDACTED] An Air Force brat, he grew up in various locations throughout the southeastern United States. After graduating from Bossier High School in 1971, he attended Louisiana Tech University where in 1975 he earned a Bachelor of Science Degree in Business Administration and received his Air Force commission. He first served at Mountain Home AFB, Idaho as a Maintenance Support Officer in supply and as a Vehicle Maintenance Officer in transportation. In 1978, he attended undergraduate navigator training at Mather AFB, California and was subsequently assigned to K.I. Sawyer AFB, Michigan. He served there from 1979 to 1984 as a B-52 navigator, instructor navigator, radar navigator, instructor radar navigator, and standardization/evaluation instructor radar navigator. He was then assigned to Castle AFB, California as a B-52 Combat Training School instructor radar navigator. While there he earned a Master of Science Degree in Systems Management from the University of Southern California. He entered the School of Systems and Logistics, Air Force Institute of Technology in May 1987. He is married to the lovely Catherine Irene Ford and is the proud father of two daughters, Malayna Rose and Jessica Lee.

[REDACTED]

[REDACTED]

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION / AVAILABILITY OF REPORT  Approved for public release; distribution unlimited	
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE			
4. PERFORMING ORGANIZATION REPORT NUMBER(S)  AFIT/GLM/LSM/88S-19		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION School of Systems and Logistics	6b. OFFICE SYMBOL (if applicable) AFIT/LSM	7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) Air Force Institute of Technology Wright-Patterson AFB, OH 45433-6583		7b. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING / SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (if applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS	
		PROGRAM ELEMENT NO.	PROJECT NO.
		TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification)  A MODEL FOR TRANSLATING MAC FLYING HOURS INTO AIRLIFT CAPABILITY (UNCLASSIFIED)			
12. PERSONAL AUTHOR(S) James M. Ford, M.S., Major, USAF			
13a. TYPE OF REPORT MS Thesis	13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Year, Month, Day) 1988 September	15. PAGE COUNT 258
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) Airlift Operations, Cargo, Cargo Handling, Air Logistics Support, Transportation	
FIELD	GROUP		
15	05		
19. ABSTRACT (Continue on reverse if necessary and identify by block number)  TITLE: A MODEL FOR TRANSLATING MAC FLYING HOURS INTO AIRLIFT CAPABILITY  Thesis Chairman: Kent N. Gourdin, Major, USAF (Retired) Asst Professor of Logistics Management  Approved for public release IAW AFR 190-1.  WILLIAM A.  17 Oct 88 Associate Dean School of Systems and Logistics Air Force Institute of Technology (AU) Wright-Patterson AFB OH 45433			
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL Kent N. Gourdin, Major, USAF (Retired)		22b. TELEPHONE (Include Area Code) 513-255-4149	22c. OFFICE SYMBOL AFIT/LSM

MAC maintains a global airlift system to support both wartime and peacetime passenger and cargo airlift requirements for the Department of Defense. Users of the global airlift system submit quarterly cargo requirement forecasts for each fiscal year which are then matched against MAC flying hours to determine if there is a surplus or deficit of airlift capability. If there is a deficit, MAC purchases commercial airlift to move the excess volume. The purpose of this research was to develop, test, and validate a model that will accurately translate aircraft flying hours into airlift capability. HQ MAC officials were concerned that airlift capability may not be accurately determined for each new fiscal year. Airlift capability was determined for each new fiscal year by choosing a busy month in the prior fiscal year and using that month as an average month of capability for the year.

The proposed model was compared to the current methodology to determine which was the better technique. Using the absolute percentage error as a basis for comparison, it was found that, overall, the model was more accurate than the current methodology. The model was dramatically more accurate in the Pacific Region, but was slightly less accurate in the Atlantic Region. The model also generated additional information that would allow MAC to more effectively purchase long-term commercial airlift. Using BASIC programming language, a computer program of the model was written to allow for routine use by MAC personnel.